

MARCH 1975 30 CENTS

Consumer

BULLETIN

The Original Consumer Information Magazine
Testing and Reporting on Products since 1959

TESTS OF

Washer-dryer combinations

Read about their advantages and
disadvantages before you buy



CHEVROLET, DODGE, STUDEBAKER LARK TESTED

Nylon or rayon tires? Tire experts comment

COLOR FILM

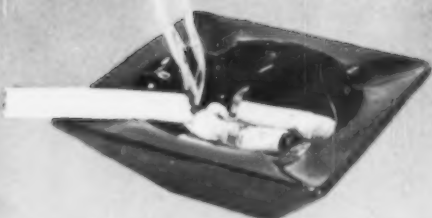
The right film and the right filter
are vitally important

TOOTHBRUSHES TESTED

Shape, size, and make are important

ARSENIC IN CIGARETTES

Some American brands made with Turkish
tobaccos were found to be low in arsenic



Letters from our readers

TV tubes

Recently I had to replace a picture tube in my television set. My TV repairman suggested that I try a reconditioned tube for around \$18; he says it will be as good as a new one which costs \$30. Can you enlighten me?

L.L.H., New York City

► We generally advise the purchase of a new picture tube, preferably one made by RCA, GE, Sylvania, or Du Mont. The quality of reconditioned tubes has been a subject of discussion for some time in several television servicing magazines, and since this would indicate that a strong element of doubt exists, we feel that ultimate consumers are best advised to purchase a brand-new tube. One should certainly buy, however, from a dealer of substance and good reputation, for some used tubes have been reconditioned to look like new ones and offered for sale by less reputable dealers as new tubes, at "cut prices."

New tubes made by any one of the above-named manufacturers will be supplied with a guarantee form which you will have to fill out and return directly to the manufacturer or his distributor. Some form of guarantee might, of course, be supplied with a reconditioned tube, but remember that there are special risks in buying any used tube, and you must depend on the company which does the reconditioning to back up the guarantee—and it must still be in business when you need the guarantee fulfilled. So far as we know, none of the major companies which manufacture new picture tubes also sell reconditioned tubes.

Cameras

We have been considering getting a finer camera than the one we now have. Do you have anything on the single-lens reflex camera which may help us in making a decision?

A.S.R., New Jersey

► Single-lens reflex 35 mm. cameras are discussed in the latest *Consumer Bulletin Annual* on pages 67 and 69. There is, however, considerably less interest in single-lens reflex cameras than in regular 35 mm. range-finder cameras, particularly now that several of the latter are available that can be used with interchangeable lenses. Besides, for normal users the focal-plane shutter, used on most single-lens reflex cameras, is much less desirable, for several reasons, than the between-the-lens shutter.

It is our opinion that the single-lens reflex cameras have little to offer for their higher price over the regular 35 mm. cameras, although they do permit ready use of lenses with a wide range of focal lengths without change of any details of the camera or finder, and facilitate studying, composing, and focusing the scene on a ground glass the same size as the negative. The ground glass shows what the camera sees up to the moment the picture is actually taken (provided the scene is lighted brightly enough for the image to be clearly seen and sharply focused on a ground-glass screen).



Encyclopedia

We have been thinking of purchasing an encyclopedia for our young daughter. The Encyclopaedia Britannica has been suggested, but your suggestions will be given serious consideration also. Just roughly, how much should we expect to pay for a good encyclopedia?

E. O., New York

► In general, we would advise against purchase of an encyclopedia for reference use by a youngster in high school unless the encyclopedia is to be used by the whole family. If the purchase is primarily for a young person, we believe the \$200 or more that the encyclopedia is likely to cost can be much more effectively employed in buying individual books on various topics of interest from time to time. An encyclopedia contains much material that will never be referred to or used, and much information that necessarily is not as up to date as that which can be found in recent books. Where it will be used by adults, or by adults and children, an encyclopedia is a valuable reference work in almost any home.

If you do decide to buy an encyclopedia, I suggest you should also consider Collier's Encyclopedia, which has some advantages over the Britannica, especially for a young person and for people in the United States. The Collier's Encyclopedia is priced at about \$200 up, depending on the binding. If you wish information about it, you can address the publishers, but if you don't want a salesman to call, say so in your letter.

There are firms in the larger cities that offer a selection of secondhand encyclopedias. You might be able to save a considerable amount in that way, in buying one of the leading encyclopedias, if they happen to have the set you want, but obtain a written guarantee that if any volume is found to be defective, or pages are missing, upon examination by the user later on, a replacement, or photostats of the missing pages will be supplied without charge.

One word of caution in regard to buying a new encyclopedia: many of the salesmen are real artists in their trade; don't be "high pressured" and don't believe any claims that you have been selected to get something "free" or at a specially low price. Keep your eyes on the total price and do not sign up for future annual supplements unless you're sure you want and can afford them. Make sure you know exactly how much you will have to pay for any such supplements or annuals you may agree to accept in the future.

The Consumers' Observation Post

FROZEN FOODS should be kept at zero temperatures in the home freezer and refrigerators. According to the United States Department of Agriculture, temperatures above zero, even well below 32 degrees, won't keep foods at their best for long. Even when foods are kept at 10° to 20°F for brief periods, alternating with periods of zero or lower, damage will be done that may not always be visible. It is easy to see when peach slices turn brown; and poultry meat becomes dark; green snap beans lose their color; and orange juice concentrate tends to separate when reconstituted with water. But, you can't readily detect fading flavors, changes in texture, or the disappearance of an essential vitamin.

* * *

DETERGENT BARS ARE INCREASING in popularity. The Food and Drug Administration has classified these products as cosmetics, and their labeling now comes under the jurisdiction of the Food, Drug, and Cosmetic Act. Although they are a boon in hard-water areas, many users have reported unfavorable skin reactions to the use of such synthetic detergents in place of toilet soap.

* * *

INDISCRIMINATE USE OF THE IMPORTANT ANTIBIOTICS may involve serious hazards, even death, to the patient, according to Dr. Wallace Herrell of Lexington, Kentucky. Writing in the Journal of the American Medical Association, he warns the physician to be alert for reactions, even with an antibiotic like penicillin which has a relatively low degree of toxicity. Dr. Herrell suggests that there is strong evidence that the use of the tetracycline family of antibiotics is the chief factor involved in the existence of infections caused by the dangerous antibiotic-resistant staphylococci in hospitals.

* * *

IF THE HANG TAG ON A GARMENT READS "WASHABLE," what does it mean? The woman with an excellent automatic washing machine is likely to think that she can throw the garment in with the rest of the laundry and expect to have it come out clean, bright, and wearable. But perhaps the fabric alone is washable; linings may shrink; decorative trimmings may bleed; and buttons get out of shape. The American Institute of Laundering points out also that there is much more involved than washability in a good garment; the fabric should be resistant to perspiration, bleeding, and crocking, fast to sunlight, as well as laundering. These criteria of good performance are included in the published standard for rayon and acetate, L22, and it is hoped will be available in the not too distant future in revised form as an all-textile standard under the procedures of the American Standards Association. Until this standard is put into effect and its application indicated on hang tags and on labels, the housewife will have to pay her money and take her chances.

* * *

THE KITCHEN SINK IS NOT APPROPRIATE FOR DEVELOPING FILM or making prints. For one thing, some of the solutions are harmful to the porcelain enamel surface of the sink, according to plumbing trade associations. Once the enamel is eaten away, there is no way of patching it. In cases where a rubber drainboard mat is used to protect the surface of the enamel against abrasion, it should be cleaned and dried after each use so that it does not retain harmful liquids in contact with the sink enamel that may cause subsequent damage.

* * *

IN CASES WHERE THERE IS SKIN IRRITATION OR DERMATITIS, one should avoid using a steam iron. That was the advice from Dr. George E. Morris of Boston, who found that his patients' eruptions on the hands and forearms were made worse by use of a steam iron in connection with their work.

STEREOPHONIC SOUND is the latest advertising and promotion gimmick. According to Home Furnishings Daily, stores report that stereo is cutting down on their hi-fi trade by creating confusion in the consumer's mind as to what he really wants; and that, furthermore, stereo is so hard to explain to the non-technical listener that the average customer has a negative reaction to it. One store executive suggested that there needs to be a cheaper technique for demonstrating stereophonic sound for the consumer before stereo sets can be sold effectively. Of course, price is another barrier; \$200 for an elementary set and about \$70 for an extra speaker make the prospective purchaser think twice before committing himself.

* * *

PROPER FOOD, particularly for breakfast, is an important factor in the prevention of accidents. According to a survey reported in Safety News—letter of a plant which had an average of 1500 employees, people on the first shift had more accidents than those working on the second shift. Investigation showed that approximately 75 percent of the accidents happened to those workers who had not eaten breakfast; the largest number of the injuries occurred at 10 o'clock. The supervisors at the plant were asked to encourage all employees to eat an ample breakfast every day before coming to work.

* * *

THE LITTLE FOREIGN CARS bought abroad and brought back as used automobiles are now subject to the 10 percent federal excise tax when resold, according to a new revenue ruling reported in a trade paper. The tax is levied on the first U.S. sale of an imported car, whether it be used or new.

* * *

SHAMPOOING RUGS ON THE FLOOR AT HOME cannot be done successfully. According to a manufacturer of a professional rug cleaning product, only the top surface can be cleaned by the consumer or even professionally by the shampoo-and-water method of on-location cleaning. He points out that the foam and water drain through the surface of a rug, leaving a film of soap on the fibers and embedding the dirt into the base. The powder or granular material method of cleaning a rug he considers quite unsatisfactory because it leaves a dull residue, which is abrasive and may damage the fibers. Professional cleaning, with the use of a rotary-scrubbing machine, and thorough rinsing (not possible in the home) are necessary for a thorough rug cleaning job to insure that the fabric is clean all the way through.

* * *

ISSUING FRAUD ORDERS on quack medical products is one of the Post Office Department's activities. The most frequent offender is the reducing nostrum sold with the claim that it will enable the purchaser to lose weight without dieting. Next in order come cancer cures, then arthritis cures; after that there are the nostrums for clearing up the skin, for growing hair on bald heads, and for restoring sexual potency. According to one report, 106 persons, who were taking in a total of \$225,000 a day, filed agreements with the post office to discontinue their questionable enterprises. That's a lot of money being wasted by credulous consumers.

* * *

AN ELECTRIC RANGE should last at least 10 years in service. The Tappan electric range, for example, is built to give at least 10 years' service and, according to the works manager, the company has found that the average life is around 15 years. The Tappan Company makes a point of servicing all Tappan ranges within 35 miles of its factory in order to keep in touch with the performance of its product in the field and to give its engineering department an opportunity to secure firsthand information on what servicing is most often required. It is a technique that other major appliance manufacturers might well follow.

(The continuation of this section is on page 37)

Consumer Bulletin

THE ORIGINAL CONSUMER INFORMATION MAGAZINE

Consumers' Research is a non-profit institution. It is organized and operates as a scientific, technical, and educational service for consumers. The organization has no support from business or industry. Its funds come solely from the ultimate consumers who read Consumers' Research Bulletin.

Scientific and technical staff, editors, and associates: F. J. Schlink, R. Joyce, D. C. Allen, M. C. Phillips, Erma A. Hinek, F. X. Hinek, Donald M. Berk, and A. R. Greenleaf. Editorial Assistants: Mary F. Roberts, B. Beam, and Ellen J. Snyder. Business Manager: O. D. Carnish.

Consumer Bulletin is issued monthly by Consumers' Research, Inc., at Washington, N.J. Copyright, 1959, by Consumers' Research, Inc., Washington, N. J.; all rights reserved. Subscription price (12 issues), \$5 per year, U.S.A. (Canada and foreign, \$5.20). For libraries, schools, and colleges, a special subscription of nine monthly Bulletins (October-June, inclusive) is available at \$3; Canada and foreign, \$3.20.

When asking for a change of address, the subscriber should give the old address as well as the new one. Be sure to include a postal zone number if your city has been zoned. Allow five weeks for the change to become effective.

Responsibility for all specific statements of fact or opinion at any time made by Consumers' Research lies wholly with the technical director and staff of the organization.

Note: Consumers' Research does not permit the use of any of the material in its Bulletin for any sales promotion, publicity, advertising, or other commercial purposes. Application for permission to reprint for other purposes should be made by letter to Consumers' Research, Washington, N.J.

Listings usually are arranged in alphabetical order by brand name (not in order of merit) under each quality or performance rating. A numeral 1, 2, or 3 at the end of a listing indicates relative price, 1 being low, 3 high. Where the 1, 2, 3 price ratings are given, brands in the 1, or least expensive group, are listed alphabetically, followed by brands in price group 2, also in alphabetical order, etc. A quality judgment is wholly independent of price.

Entered as second-class matter, November 9, 1934, at the Post Office at Washington, N. J., under the Act of March 3, 1879; additional entry at Easton, Pa. Printed in U.S.A.

VOL. 42, NO. 3

CONTENTS

MARCH 1959

| | |
|--|----|
| ● Clothes washer-dryer combinations..... | 6 |
| Before you decide to buy a combination machine, be sure to weigh the advantages against the disadvantages—and don't be hasty in your decision | |
| Making electric plugs safe..... | 10 |
| Plan—then plant..... | 12 |
| Confused about the problem of planting around your home? This article offers suggestions on how to get the best and most pleasing results with economy and the least risk of failure | |
| ● Chevrolet..... | 16 |
| ● Dodge..... | 18 |
| ● Studebaker Lark..... | 20 |
| Vibrator-powered hand sprayers..... | 22 |
| Arsenic in cigarettes..... | 24 |
| Three domestic brands made with Turkish tobaccos were found to be low in arsenic | |
| ● Color film..... | 26 |
| New information on choice of film and filters; the meaning of ASA exposure index numbers, and guide numbers for flash photos | |
| Tests of toothbrushes..... | 29 |
| Brand, shape, and size are important | |
| Nylon or rayon tires? Tire experts comment..... | 31 |
| Important note about Senti-lite night-and-day light switch..... | 31 |
| Color TV for \$5? Positively no!..... | 32 |
| Baby bottles—plastic or glass?..... | 39 |
| A helpful preliminary report on a study now under way | |

FEATURES

| | |
|--|----|
| Letters from our readers—TV tubes; Cameras; Encyclopedias..... | 2 |
| The Consumers' Observation Post..... | 3 |
| Off the editor's chest—Springtime rackets to beware of..... | 33 |
| Phonograph Records—Walter F. Gruening..... | 34 |
| Ratings of Current Motion Pictures..... | 35 |

NOTE TO OUR READERS

Because of the importance of other material, it has been necessary to omit the cumulative index of previous 1959 Bulletins from this issue.



Clothes washer-dryer combinations

*Before you decide to buy a combination machine,
be sure to weigh the advantages against the disadvantages
—and don't be hasty in reaching your decision.*

THERE IS perhaps no other home appliance sold that holds as precarious a position on the consumer's "wanted" list as does the washer-dryer combination. Although it was predicted by some that the combination appliances would soon replace the separate units, manufacturers and dealers have found sales of the combination to be disappointingly slow. Sales have been so low, indeed, that the heavy initial manufacturing outlays for tooling and production have not yet been recovered sufficiently to warrant manufacturers' making additional expenditures for major changes and improvements in design. Few modern appliances need as much study by the consumer before buying, in weighing costs and disadvantages against advantages, compared with the separate washer and dryer units, as does the washer-dryer combination. One should therefore make his decision only after a leisurely review and weighing of the pros and cons.

In weighing cost, there is certainly something to be said in favor of the washer-dryer combination as opposed to the deluxe, higher-priced automatic washers, selling in the \$400 price range, and comparable dryers. On the other hand, installation costs in some areas may affect the total cost. Before buying a combination, get estimates on installation charges. This appearingly minor matter could be quite costly. Automatic washing machines require 2-wire 110-volt electricity (no problem); automatic clothes dryers can be operated on either 110 volts (likewise no problem) or 3-wire, 220 volts (the latter is much faster and hence more desirable from the standpoint of drying time); a combination, unless it uses gas as the

fuel for drying, requires 220 volts (gas dryers will operate on 110 volts).

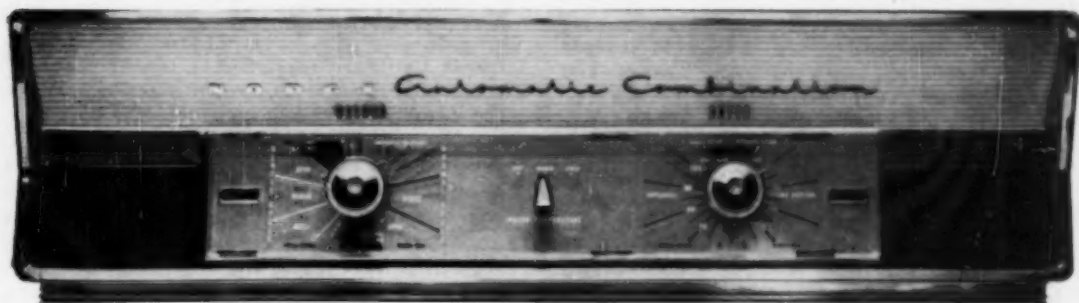
In families of somewhat limited income, it may be best to budget for a washer first and then a dryer later, in order to avoid committing the family to the longer or larger payments required for a combination.

Still another factor to be considered is performance. Despite the seeming greater convenience of the combination appliance, the performance, overall, of the washer-dryer combinations tested did not compare favorably to that of separate washing machines and clothes dryers in the judgment of Consumers' Research. On this account, none of the combinations was given a rating higher than *B. Intermediate*.

Advantages

1. In most instances, the compactness of the combination is perhaps its greatest plus factor. Being able to fit both a washer and a dryer in the kitchen, for example, in about the space required for one or the other of the two single units may often help to solve a space problem. One might even decide, in exceptional cases, to locate the combination in a bathroom, a built-in cabinet in some room, or under the stairs, or in some other out of the way place.

2. A second obvious advantage of the combination is that it eliminates the need for handling wet clothes. With a combination appliance, the soiled clothes are placed in the machine and need not be handled again until the washed and partly dried clothes are removed at the end of the drying cycle. Because the clothes do not need to be transferred from one appliance to the other,



the operator is free to do other work during the entire washing and drying cycles.

3. A combination will, in general, do a better job of washing than a single-unit automatic washing machine of the drum type. This is because the drums in the combinations are larger than those in the automatic washing machines. The best washing action, however, is obtained in the agitator type automatic washing machines.

If the above three advantages do not seem particularly important to you, it is likely that the disadvantages of a combination will outweigh the advantages it offers, and you will perhaps prefer to buy separate washer and dryer units.

Disadvantages

1. For the same reason that some will want a combination, others will find it inconvenient. In a combination you either wash or dry a load of clothes, but you cannot do both at the same time, for while clothes are being washed, the dryer is unavailable, and vice versa.

2. Costs of electricity or gas for operation of combinations can be expected to be noticeably higher than for separate units. Except for the *Bendix Duomatics*, washer-dryer combinations do a relatively poor job in extracting water from the clothes during the spin periods. This, of course, means that the drying cycle must be extended for a longer period; thus, more gas or electricity will be required by a combination than by a separate dryer. As a quick comparison, automatic washing machines leave from 4½ to 6½ pounds of water* in an 8-pound load of clothes after the final spin, whereas the combinations leave from 8 to 10½ pounds of water for the same size load. For all-electric models, this means about 6½ to 7½ cents to dry a load in a separate dryer and from 10 to 15 cents in a combination (plus the cost of the amount of cold water used to condense the vapor). With the *Bendix* combinations, already mentioned as the exceptions in regard to poor extraction being characteristic of combina-

tion machines, the cost of drying a load will run to about 9 cents. The *Bendix Duomatics* using gas as fuel for drying will cost about 2 to 3 cents per load.

3. Because of the additional water that must be removed during the drying cycle, the total running time for washing and drying a load of clothes is increased substantially with a combination machine. And as noted, only one load can be washed and dried at a time, whereas with separate units a second load can be washed while the first load is being dried.

4. The combinations not only do a relatively poor job in extracting water, but, with one exception, the *Whirlpool*, they use large quantities of cold water for condensing and so disposing of the steam. Such use of water may not only be expensive and burden a limited water supply, as in a rural or suburban home with its own well and pump, but it can often overload the sewage disposal system, if the waste water drains to a cesspool or septic tank.

5. The size of the drum is of considerable importance since this will determine the size of load that can be washed and dried and particularly as to the degree of wrinkling. Smaller drums increase, larger drums decrease the tendency to wrinkle clothes and sheets. The drums in combinations are smaller than those in separate dryers. The user can, however, reduce the wrinkling caused in a combination by reducing the size of the load washed and dried. Since the drum in the *Philco-Bendix Duomatic Model CE-792* is smaller even than in most other makes, excessive wrinkling will occur unless the size of the load is kept under about 5 pounds.

There are a few other points—of lesser importance, perhaps—that one should give some thought to before running the risk of having to find them out from actual experience.

6. Most combinations have the door hinged at the side, making the door open to one side. A more desirable arrangement is to have the door hinged at the bottom so that the door, when

* A gallon of water weighs 8.3 pounds.

opened, can be used as a shelf, thus facilitating loading and unloading and helping to prevent clothes from dropping to the floor. *Kenmore* and *Westinghouse* have the desirable type of door.

7. When some part of the combination fails to operate, both washer and dryer may be out of service. If the difficulties are serious enough, the entire appliance may need to be replaced, and a good many people have had to sacrifice their whole investment in a combination appliance in a relatively short time because it had become impracticable to keep it in running order.

8. A combination will depreciate at a faster rate than will separate units. Average "life expectancy" of a combination is in the neighborhood of 5 years compared to about 7 years for an automatic washing machine and 10 years for a dryer. This difference, on a per-year basis, can amount to a very substantial sum of money.

9. You can also expect that *more than a normal amount of service and repairs* will be needed to keep the combination running. This not only causes greater inconveniences in not being able to wash or dry for several days or even weeks, but may become excessively expensive. Quality of service that one can expect can be determined by ascertaining in advance whether or not good local repair service with proper specialized training under factory experts is available. This should be checked *before* one decides to buy.

New models tested

About the only thing new in the washer-dryer combination field during recent months has been the introduction of a new combination by Norge, and the new lower-priced *Philco-Bendix Duomatic*, which retails at \$390 as compared to \$500 for most others. Both of these combinations use cold water (with appropriate connections to the drainage piping) for condensing the steam. The *RCA Whirlpool* is still the only all-electric combination designed to be vented to the outdoors.

No doubt many consumers will find the lower price of the new *Duomatic* to their liking, but it is questionable whether it will fully meet their requirements, on account of the small size of the drum. Although many manufacturers claim that their combinations will wash and dry an 8- or 9-pound load of clothes, few people actually measure a load by weighing it. Instead, they fill the tub with what they consider to be a full load of clothes. The actual weight of the load will vary with the individual, but it averages about 6½ to 7 pounds. The same holds for separate washing machines and dryers. While it is possible to wash and dry an 8- or perhaps even a 9-pound load in the new *Duomatic*, a more realistic load, for better washing and less tendency to wrinkle fabrics, will be in the neighborhood of 5 pounds. This means that what would normally constitute three loads

WASHER-DRYER

| Brand | Rated capacity, pounds | Dimensions, inches | | | Time to wash, full cycle, minutes | Time to dry, full load, minutes | Water used, gallons | | | Water left in clothes, percent dry weight |
|---|------------------------|--------------------|--------|-------|-----------------------------------|---------------------------------|---------------------|------|-------|---|
| | | width | height | depth | | | washer | | dryer | |
| | | | | | | | hot | cold | cold | |
| Bendix CGR-C | 8 | 36 | 47 | 27 | 40 | 45 | 18 | 11 | 26 | 83 |
| Bendix CGV-C | 8 | 36 | 47 | 27 | 40 | 45 | 18 | 11 | — | 83 |
| Easy CDF | 8 | 28 | 39 | 26 | 39 | 65 | 20 | 5 | 33 | 102 |
| General Electric 1WD560N1W | 8 | 30 | 36 | 26 | 55 | 80 | 16 | 20 | 40 | 110 |
| Kenmore—see RCA Whirlpool below, and in listings | | | | | | | | | | |
| Norge WD600 | 9 | 31 | 45 | 27 | 28[2] | 70 | 18 | 12 | 38 | 123 |
| Philco-Bendix CE-792 | See note[3] | 27 | 44 | 26 | 33 | 60 | 11 | 10 | 31 | 82 |
| RCA Whirlpool W5710500 | 9 | 33 | 45 | 26 | 38 | 65 | 14 | 9 | — | 120 |
| Westinghouse Deluxe WD-2 | 8 | 32 | 41 | 29 | 52 | 85 | 20 | 15 | 46 | 117 |

[1] This unit used approximately 13,400 Btu of gas to supply heat for drying a full load.

[2] 16 minutes on short cycle; 10 gallons hot, 16 gallons cold water; 160 watt-hours.

[3] Instruction book advises filling tub 2/3 full; no weight load indicated.

in an automatic washing machine and in most combinations would be four loads in the new *Philco Duomatic*. The cost of operating the new *Duomatic* would be raised somewhat too because of the larger amounts of detergent, water, fuel for heating the water, and electricity for operating the machine in washing and drying.

The *Norge* combination will handle the customary 7- to 8-pound load as satisfactorily as any other combination, and in Consumers' Research tests it was found somewhat superior to combinations in general in washing ability. Its performance was poor, however, in removing water from the clothes during the spin cycle. The new *Philco-Bendix* showed better washing action than its predecessors.

For the convenience of our readers, the results and ratings from a previous report (January 1957 CONSUMER BULLETIN) on several combinations are also included here. Later models of these are similar to the ones reported on here.

B. Intermediate

Bendix Duomatic, Model CGR-C (Philco Corp., Philadelphia 40) \$550. All-electric model. Effectiveness in washing an 8-lb. load, fair. Machine had pre-wash or pre-soak cycle and provision for small-, medium-, or full-load fill. Did good job of extracting water from clothes by spinning. Machine vibrated during the fast spin and was relatively noisy. Cost, for electricity, to wash and dry a load of clothes will be about 12 cents.

COMBINATIONS

| Electricity used for complete cycle, watt-hours | | Temperature in dryer, "Low," degrees F | | Temperature in dryer, "High," degrees F | | Water temperature selection | |
|---|--------|--|------|---|------|-----------------------------|------------------|
| washer | dryer | drying range | peak | range | peak | wash | rinse |
| 1080 | 3760 | — | — | 150-180 | 245 | Hot, Med., Warm | Warm, Cool, Cold |
| 320 | 275[1] | — | — | 130-160 | 230 | Hot, Med., Warm | Warm, Cool, Cold |
| 410 | 4490 | 160-180 | 215 | 220-235 | 300 | Hot, Warm | Warm |
| 345 | 4590 | — | 190 | — | 260 | Hot, Warm | Warm |
| 260 | 5900 | — | — | 150-170 | 255 | Hot, Warm, Cold | Warm, Cold |
| 200 | 3080 | — | — | 140-170 | 200 | Hot, Warm | Warm, Cold |
| 1000 | 6200 | 95-115 | 150 | 95-115 | 230 | Hot, Med., Warm | Warm |
| 290 | 5940 | — | — | 190-225 | 305 | Hot, Warm | Warm |

Bendix Duomatic, Model CGV-C (Philco Corp.) \$550. Washer unit operated on electricity; heater of the dryer operated on gas. Performance of this combination was similar to that of Model CGR-C. Cost to operate: for electricity, less than 1/2c; for gas, about 2c; or a total of about 2 1/2c per load.

Easy, Model CDF (Easy Washing Machine, Division of Murray Corp. of America, Syracuse 4) \$480. Effectiveness in washing an 8-lb. load, fair. Machine had to be fastened to floor. Dial could be preset to stop machine at the wash, rinse, or dry cycle. However, if the control dial was reset during operation beyond the end point of the cycle, the machine did not stop at the end of the drying period but proceeded into a complete new washing cycle. Temperatures reached during drying cycle, relatively high. CR suggests that the new owner of this machine fill, drain, and refill the washer several times in the presence of the installer or demonstrator because the water inlet line requires very careful adjustment to avoid the possibility of flooding. Cost to operate, for electricity, 12c per load.

Kenmore Turbo-Matic (Sears, Roebuck & Co.) Beginning at \$365, plus shipping charges, when ordered from catalog. This model was similar to *RCA Whirlpool*, but the controls on the *Kenmore* were located on a panel at the rear of the top instead of at the front of the machine. The *Kenmore* had an 8400-watt air heater which gave faster drying than the 5600-watt heater of the *RCA Whirlpool*, but cost to operate, per load, will be about the same.

Norge, Model WD600 (Norge Division, Borg-Warner Corp., Chicago) \$540. Effectiveness in washing an 8-lb. load was only fair, but the *Norge* was nevertheless the best, overall, of the combinations tested. Machine had automatic shut-off controls operating at the end of the drying cycle for small and normal loads as well as manual (time) controls. Automatic shut-off controls have the disadvantage that they permit the dryer to run until clothes are overdry. Machine had regular and short wash cycles. Cost to operate, for electricity, about 14c per load (17c using automatic shut-off).

Philco-Bendix Duomatic, Model CE-792 (Philco Corp.) \$390. Effectiveness in washing, fair. Machine had pre-wash or pre-soak cycle. A simple, compact, and attractive looking combination, of straightforward easily operated design, but its drum size is too small for normal (8-lb.) loads. For best results, should not be loaded with more than about 5 lb. of load. Cost to operate, for electricity, about 9c per load. ¶Model CE-794 is the same as CE-792 except in styling. These combinations are available for gas or electric operation of the dryer.

RCA Whirlpool, Model W5710500 (Sales No. DC-50) (Whirlpool-Seeger Corp., St. Joseph, Mich.) \$530. Effectiveness in washing a 9-lb. load, fair. Electric water heater made possible a hot-water wash, even if warm or cold water was supplied; the fact that this heater operated during the entire wash period when water temperature was set at "Hot" caused a relatively high consumption of electricity for the wash cycle. The dryer operation

(Continued on page 32)

Making electric plugs safe

NO MATTER whether it's Mom's food mixer or Dad's new bench saw, if Junior can plug it in and turn it on, someone may get hurt. Sometimes the hurt may be a serious one. A similar possibility exists with many other power-driven appliances and tools in common use around the home. It is well worth while to use any reasonable means for preventing an accident or injury to a young and inexperienced child whose curiosity and desire to learn and to try new things leads him to all sorts of hazardous explorations.

Many small hand tools, such as electric drills and saws, can be kept under lock and key when Johnny is not yet old enough to use them in his father's absence. An electric bench drill or saw, however, is not readily stored, though it can be protected by a locked switch requiring use of a special key. It is necessary and desirable in many instances that it be made unusable while Dad is away from home, and the youngster not under constant close supervision.

If the tool or appliance is portable, that is one which must be plugged into an electrical outlet, rather than one which is permanently "wired-in," a device that makes it impossible to insert the appliance plug on the connect-line cord into a socket or receptacle can furnish a safeguard.

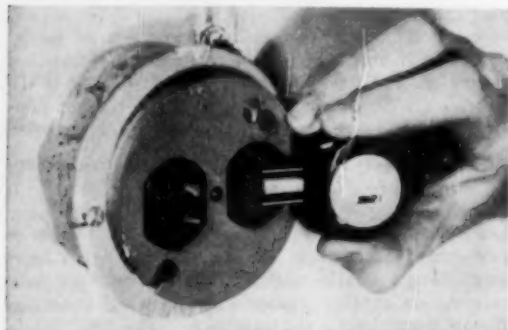
Several devices are now available which will tend to prevent such unauthorized use of an appliance. Among these are the *Yale Lock-It Plug*, the *Lek-Tro-Lok*, and the *Master "cub" Padlock*.

The *Yale Lock-It* is a plug which replaces the one supplied with the tool. It has a built-in lock mechanism (a good cylinder-type lock with four tumblers) which actuates a nylon bar positioned between the two blades on the plug. When the device is locked, this bar stands out from the bottom of the plug; in this position, it prevents

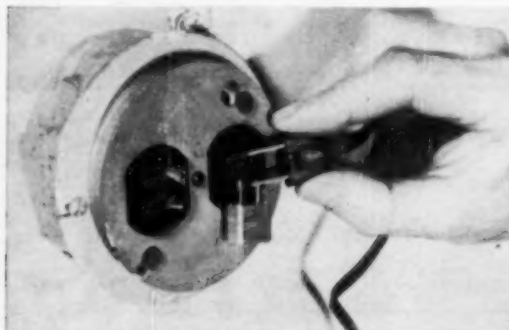
insertion of the prongs or blades of the plug into an electric outlet or receptacle. When the key is turned to unlock the device, the bar is retracted into the body of the plug so that the plug can be inserted into a power receptacle in the usual way.

The body of the *Yale* plug was bulky and large in size, approximately $1\frac{3}{4}$ inches wide, $1\frac{7}{8}$ inches long, and $1\frac{1}{8}$ inches thick. While it would be a satisfactory deterrent to young children, it could be by-passed by a grownup or an older boy familiar with electrical things, simply by attaching clips or improvised extension leads to each exposed blade, without the owner's knowing the tool had been used. When locked, however, the *Yale* plug could not be removed by disassembly for the large circular metal disk at the front covers the head of one of the two screws that must be removed to take the plug apart. This feature adds to the size of the plug and it is of doubtful value, for any grownup desiring to make unauthorized use of the tool on which the plug was attached would likely prefer simply to cut the line cord and attach an ordinary plug or use the improvised temporary extension leads already mentioned. The *Yale Lock-It* is a two-blade plug and should not be used on any portable tool or appliance which is normally equipped or should be equipped with a three-blade plug having a grounding connection for extra electrical safety.

The *Master "cub" Padlock* is a miniaturized version of the usual padlock with laminated metal construction. The shackle, which is only $\frac{1}{8}$ inch in diameter, is sufficiently small that it will fit through the hole to be found near the tip of the blades of most electric plugs. When the shackle is locked into that hole, it is impossible to insert the blades into a receptacle. The *Master* device provides an effective and inexpensive means of preventing unwanted use of a tool or an appliance



Yale Lock-It Plug



Master "cub" Padlock, No. 9

by children. As with the *Yale Lock-It*, however, it can be by-passed because the blades are exposed and, of course, it cannot be removed if the key turns up missing. It should perhaps be pointed out, however, that such a small inexpensive padlock has double utility; it may be found useful for a number of other purposes in the home.

The *Lek-Tro-Lok* was the only device CR examined which would likely fit any type of plug rated at 15 amperes, 115 volts, which the homeowner might encounter. It was simply a small block of hard plastic, size $\frac{3}{4}$ inch wide by $\frac{3}{8}$ inch long by $\frac{3}{16}$ inch thick. Molded in the center of this block was a slot. In use, the block fitted over and covered one of the blades on the connecting plug of a tool or appliance.

The *Lek-Tro-Lok* is held in place by a small Allen-type setscrew in its side which, when screwed in, grips one of the blades and prevents the removal of the device. When in place, the *Lek-Tro-Lok* prevents use of the plug to which it is attached. Because one of the blades is completely covered, the plug cannot be by-passed with leads attached to the blades—though, of course, the connecting wire can be cut, and a new plug attached. The “key” supplied is very small and is, essentially, a short piece of an Allen-type wrench which fits the small ($\frac{3}{32}$ -inch diameter) setscrew used. Such a “key” serves its purpose, and has the distinct advantage that a substitute can easily be gotten if the one supplied is lost.

The *General Electric Safety Plug* would function probably only as a satisfactory deterrent to the prying hands of very small children from the crawling stage to perhaps the age of $1\frac{1}{2}$ or 2 years. At this age, as many of us are aware, children are prone to poke metallic objects, such as bobby pins or paper clips, into wall outlets, with danger of suffering a bad burn or a dangerous, even fatal,



General Electric Safety Plug

electric shock. Although called a plug, the *GE* device is more a combination plug and receptacle device which is a plug only because it is plugged into the usual duplex wall outlet and fastened permanently there in place by tightening a screw. It is a receptacle, too, because it has provision for the insertion of two regular lamp or appliance plugs. When a lamp is to be plugged in, for example, the tips of the blades on the lamp plug are placed in two shallow slots in a plastic disk shield covering the regular slots in the device. The plug, serving as a sort of key, is then rotated a quarter turn (90 degrees) and shoved in. When the plug is removed, the shield, which is spring-loaded, snaps back to its original position and thus covers the slots in which live electrical contact was made.

It should be noted, however, that the *General Electric Safety Plug* is not a positive deterrent to the prying hands of young children, and once they have learned how it works, its usefulness as a safeguard is gone.

The ratings in the listings following are not based upon any judgment of the quality of the devices, but rather upon the ability of each device, in the opinion of Consumers' Research, to serve its intended purpose of providing a safeguard against use of an appliance by a young child or some other unauthorized person.

A. Recommended

General Electric Safety Plug (General Electric Co., Providence, R.I.) 49c. A useful and convenient safeguard where there are very young children. 1

Lek-Tro-Lok (Riverside Mfg. Co., Woodstock, Va.) Three for \$2. 3

B. Intermediate

Master "cub" Padlock, No. 9 (Master Lock Co., Milwaukee 45) 45c. 1

Yale Lock-It Plug (Yale & Towne Mfg. Co., White Plains, N.Y.) \$1.75. 3



Lek-Tro-Lok

Where

to go

from here?



Plan—then plant

MANY a new homeowner has a nagging sense of dissatisfaction the first spring in his new location. In his mind's eye he has seen his house and grounds looking attractive and pleasant. His disappointment with their actual appearance may stem from the fact that the builder has done a strictly conventional landscaping job and has very likely used uninteresting plants.

Professionals in landscaping classify shrubs and trees as interesting and uninteresting. Evergreens which are useful for background plantings are, unfortunately, relatively uninteresting. Their dark green color, while pleasant all the year round, fails to provide the color and beauty to be found in many other trees and shrubs. It takes planning to work out an attractive, colorful, and suitable landscaping job.

First of all, take stock of the general layout of the grounds. Are the approaches to the house where they should be? If you find walks that are not used or poorly serve the household's activities you will find that the children and deliverymen, and even the adults, will traipse across the lawn and even the flower beds. Take a good look, too, at the "service areas," which you may wish to have screened with a suitable planting. The trick is to combine utility with attractiveness. Incidentally, when you think of utility be sure to have in mind the compost heap. A compost heap will provide you with good soil at a minimum cost and also give you a convenient place to dispose of garbage waste and twigs, leaves, and other organic rubbish. Everyone should have one, even if a small one.

People in new homes need to think about the soil that the builder has left behind. Many builders bulldoze away the ground cover, leaving raw, red or yellow hardpan which is scarcely suitable for lawns, let alone good growth of bushes, trees, and flowers. Renovating the soil can be expensive, in addition to being time-consuming, but experienced horticulturists point out that remaking poor soil is a necessary foundation for the successful planting and growing of plants. Good soil is not only needed for grass; it also encourages trees and shrubs to establish good

Confused about the problems of planting around your home? This article offers some suggestions on how to go about getting the best results with the least risk of failure. Many inexpensive sources of information are available to the homeowner.

If you have a large place, you may want to consult a landscape architect. One may be hard to find in your locality, however, and his services will often come high—though likely to be valuable in many cases beyond their cost. A landscape architect qualified to prepare a layout for an individual home may charge as much as \$50 for an afternoon's work.

"Stock landscaping plans" will sometimes serve; these are available from a number of sources. Your local nurseryman may have stock plans. Bear in mind, however, that a stock plan suitable for your locality may be unsuitable for your particular house. A stock plan may cost anywhere from nothing (provided the plants are purchased from the nurseryman) to \$5 or \$10.

Be wary about getting plants or shrubs from a door-to-door salesman. His plants may be reasonable in price, but unsuitable for your locality, and you will have no way of knowing about the quality, and no redress if he happens to "take" you, as many do.

root systems and to develop into fine specimens. The defects of poor soil cannot be easily corrected after planting is completed.

This is a good time to get acquainted with your County Agricultural Agent and perhaps to become associated with a local garden club. From your county agent you can get information about the soil in your locality. He can also tell you who makes soil tests, on which recommendations as to

fertilizer and other treatment can be based. Garden clubs often sponsor tours which are both interesting and useful, as they help a novice learn what plants do well in a particular locality.

It pays to *plan* the plantings. It's much easier to move a shrub on paper than in your yard or garden. Photographs are an invaluable planning aid, especially if a partial planting has already been made. Be sure to date the pictures, for you will forget whether a particular photograph was taken in April, or May, or June, and in the fall when some of the actual work is to be done, you will want to know, not guess, about what the house and grounds looked like then. It is a good idea also to equip yourself with a map or plan of your lot. Graph paper, obtainable from any art store, will make the job easier, but a large sheet of wrapping paper will do nearly as well. Put on the plan all walks, approaches, and driveways, and indicate the orientation of the property in relation to the points of the compass as well as the direction of the prevailing wind.

Experienced landscapers suggest that the first and most important purchase should be a shade tree. Select one suitable for your locality, locating it in a spot where it will shade the roof of the house from 2 until 4 in the afternoon. This tree is likely to be the one lifetime investment that the homeowner will make in plants around his house. Plan to get the most satisfactory tree you can get for your locality and be prepared to pay as much for it as you feel you can afford. Unless you are especially knowledgeable in such matters, you will find it helpful to consult the pamphlets put out by the extension service in your state to decide on suitable varieties.

Get the tree from a responsible local nurseryman, if possible. He will know how to handle it and will have the equipment to install a good-sized tree. Naturally the larger the tree, the more work is involved, and the larger the bill. Moving a large semi-mature shade tree may cost as much as \$300, but moving somewhat smaller trees may often be within the possible expenditures of the average homeowner.

If you are tempted to select a tree yourself from the woods—don't. Pick one instead from an open pasture or a field where the soil is good and not rocky, and where you can dig up with the tree a good ball of soil enclosing most of the tree's roots. A ball of roots should be at least one foot in diameter for each inch in diameter of the trunk of the tree. Of course, one should never move a tree from its natural location without the permission of the owner of the land.

Now as to your other plants. Don't be tempted to overplant. The planting should accent but not overwhelm the architecture. Be sure to

allow for the fact that as trees and shrubs grow large, they may seem quite out of place in close proximity to the walls of a house. Remember that you will likely get the greatest satisfaction by spending the money for plants and trees that are attractive during more than one season of the year. Dogwood, for example, is an interesting tree, for it has an attractive shape at all times with white or pink "flowers" in the spring, and delicate lavender twigs and branches which contrast pleasingly with its green leaves in the summertime. In the fall its leaves turn scarlet and are followed in the winter by bright berries. By contrast, the much used wigelia is relatively un-

**Beautiful 4 Year Old
EVERGREENS**

Only 33¢ each



You Get All These:

| | |
|------------------------|----------------|
| 2 American Arborvitae | 2 Mugho Pine |
| 2 Colorado Blue Spruce | 2 White Spruce |
| 2 Norway Spruce | 2 Norway Pine |

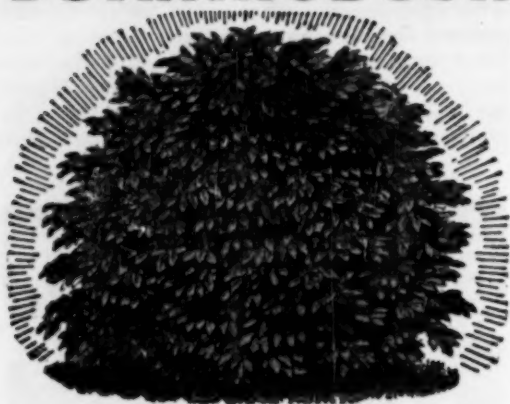
MONEY BACK GUARANTEE
On arrival. If not 100% satisfied, return for your money back.



The ad and the trees

The homeowner is holding the package of 12 trees—2 American Arborvitae, 2 Colorado Blue Spruce, 2 Mugho Pine, 2 White Spruce, 2 Norway Spruce, and 2 Norway Pine.

SPRING PLANTING SPECIAL
Flaming Spectacle of Beauty
Amazing Color-Changing
BURNINGBUSH



Every Season Brings Out a Dazzling New Color From Yellow to Red to Green to Crimson Fire.

You'll admire your Burning Bush (*Karyophylla alata compacta*) in spring, summer and winter and so will everyone else. BUT IN FALL, these shrubs will actually STOP TRAFFIC. The flaming copper crimson foliage is so brilliant that such shrubs seem to radiate light as if it were on fire. Grow 4 to 5 feet high and 3 to 4 feet wide. Plant approximately one foot apart, along foundation of your home where you can enjoy their beauty from inside as well as out. Also magnificent when planted alone or one several as a hedge. Almost never need to be clipped or pruned.

Special by Mail Price

1^{ea.} 1.98
2 for \$3.99
4 for \$7.99



The ad and the plant

Burning bush as pictured and as delivered.

interesting. Although pretty while blooming, it cannot compare with many shrubs in attractive texture or foliage. The forsythia is beautiful for a short period of time in the spring, but unless it is properly pruned—and it takes a lot of pruning—it is an unattractive bush in the summer and all the rest of the year.

Next to beauty, consider the *life* of a tree or

shrub. Dogwood and cherry trees, for example, will last about 25 years, crabapple 25 years, a yew 15 to 20 years. Dwarf plants are likely to have a longer life than larger ones. They will cost more, however, since it takes longer for a nurseryman to bring them to salable size.

How much will landscaping cost? It is estimated that complete landscaping for a brand new home may cost about 10 percent of the over-all cost of the house. Good plantings of bushes in sizes large enough to achieve the desired effect immediately are expensive, but the job does not have to be done all at once. A practical budget will call for starting out with a few interesting plants, expecting them to grow to the proper size in two or three years. (The spaces between can be filled in with annual flowers.)

Remember that if you plant all inferior plants or uninteresting shrubs you will eventually want to start all over again, pulling out everything and that means a waste of much money and time. With a good planting, although it will need revision about every five years, you will at least be left with something worth while to revise. Keep in mind that the initial cost should not itself be the deciding factor in what you get. You must always expect to spend more on care and maintenance than the price paid for the plant.

Once you get an idea of what plants you would like to have, you would be well advised to go see a reliable, responsible local nurseryman. The door-to-door salesman who shows you those pretty pictures may be giving you what appears—on paper—to be a bargain, but where will you find him to replace the plants that die and make good on the ones that turned out to be so much scrawnier than the pictures or of the wrong varieties? There are some very good mail-order nursery firms, but it is difficult to separate the sheep from the goats and even some of the good ones get into difficulties because of misleading advertising by their agencies. Even newspapers with well edited garden pages carry advertisements which horticulturists consider outrageously misleading (see illustrations). Your local nurseryman will likely have shrubs that are accustomed to growing under conditions similar to those around your own home. Furthermore, when you buy near home, you can see what you buy and can make suitable arrangement for obtaining the plants at the best time for moving them. Important quality factors you should consider include the condition of the roots, absence of damage from physical handling, and of damage from disease and insects.

Shrubs are sometimes graded, with the grading depending on the "caliper measurement" (diameter taken about 3 feet above the base) and the size of the trunk. Although you will save money

generally by buying small sizes rather than larger ones, it is hardly worth while to buy extremely young or small plants requiring extra care, just to save a small sum. "Nursing care" for plants is seldom profitable.

* * *

Consumers' Research gratefully acknowledges the generous assistance of John C. Wister, Director, and Gertrude M. Smith, Assistant Director, Arthur Hoyt Scott Horticultural Foundation, Swarthmore College, Swarthmore, Pa., in providing the background information for this discussion.

* * *

Invaluable aids for all phases of the landscape operation can be obtained, in most states, from the state agricultural extension service. One copy of each Bulletin is usually free to residents of the State. We list below for the convenience of our readers a number of selected publications on landscaping.

Arizona: *Landscaping Arizona Homes*, Rept. 166. College of Agriculture, University of Arizona, Tucson.

California: *Planning the Garden*, \$1. Agricultural Publications Office, 22 Giannini Hall, University of California, Berkeley 4.

Colorado: *Landscaping the Home*, Circ. 191-A (10c). *Plants for Mountain Homes*, Circ. 192-A (10c). Extension Service, Colorado State University, Fort Collins.

Connecticut: Bulletins on specific questions. Extension Service, University of Connecticut, Storrs.

Idaho: 13 *Considerations in Landscaping Your Home*, PNW Bul. 8. *Plantings Around the Home*, PNW Bul. 16. Agricultural Extension Service, University of Idaho, Moscow.

Illinois: *Trees, Shrubs, and Woody Vines for the Home Grounds*, Circ. 715 (20c). *Foundation Plantings*, Circ. C-720. Extension Service, University of Illinois, Urbana.

Indiana: *Ornamental Evergreens*, Bul. 320. *Ornamental Shrubs*, Bul. 324. Extension Service, Purdue University, Lafayette.



Established plantings must sometimes be replaced because of unexpected damage. Snow falling from a roof stripped these evergreens. Small tepee-like wooden structures or boxes open on two sides may be used over plants to deflect sliding snow and ice.

Iowa: *Landscape Plants for Iowa*, Pm212 (15c). *Your Farm Home Grounds*, Pm207 (15c). Publications Room, Morrill Hall, Iowa State College, Ames.

Kansas: *Landscaping*, Leaf. 27. Agricultural Extension Service, Kansas State College, Manhattan.

Kentucky: *How to Plant Shade Trees*, EC-371. *How to Plant a Shrub Border or Screen Planting*, L-158. *Planting Evergreens*, L-198. Agricultural Experiment Station, University of Kentucky, Lexington.

Maine: *Better Home Grounds*, Bul. 359. Extension Service, University of Maine, Orono.

Massachusetts: *Garden Hedges, New and Renewed*, A280. *Garden Walls and Fireplaces*, AX219. Extension Service, University of Massachusetts, Amherst.

Michigan: *Planning for Rural Homes*, Bul. CE1. *Planning for Residential Properties*, Bul. CE2. Bulletin Office, Michigan State University, East Lansing.

Minnesota: *Landscaping the Home*, Bul. 283. *Evergreens*, Bul. 258. *Woody Plants for Minnesota*, Bul. 267. Bulletin Room, University of Minnesota, St. Paul 1.

Mississippi: *Landscape Uses of Mississippi Native Shrubs. Growth and Flowering Characteristics of Camellias*, Circ. 160. Agricultural Experiment Station, State College.

Missouri: *Suggested Plantings for Missouri Homes*, Manual 54. *Improving Missouri Farm Home Grounds*, Circ. 641. Agricultural Extension Service, University of Missouri, Columbia.

Montana: *Perennials for Landscaping*, Circ. 1020. *Landscaping Planning*, Circ. 1043. Extension Service, Montana State College, Bozeman.

Nebraska: *Landscaping*, Circ. 56-1201. Extension Service, University of Nebraska, Lincoln 3.

New Jersey: *Landscape Planning*, Bul. 304. *How to Landscape Your Home*, Leaf. 97. *Fifty Small Trees for New Jersey Home Grounds*, Leaf. 86. Agricultural Extension Service, Rutgers University, New Brunswick.

New Mexico: *Beautifying New Mexico Homes*, Pamph. 100 H-2. Extension Service, New Mexico College of Agriculture and Mechanic Arts, State College.

North Dakota: *Landscape Your Home*, Bul. S407. *Evergreens for North Dakota*, Bul. A285. *Woody Ornamentals for North Dakota*, Bul. S399. North Dakota Agricultural College, Fargo.

Ohio: *Ohio Nursery Notes*: Professor James L. Caldwell. Horticulture and Forestry Bldg., 1827 Neil Ave., Columbus 10.

Oklahoma: *Home Grounds Beautification*, Circ. 544. Agricultural Extension Service, Oklahoma State University, Stillwater.

Oregon: *Plant Materials for Landscaping*, EB758. PNW Bulletins 8 and 16 (see Idaho). Extension Service, Oregon State College, Corvallis.

Rhode Island: *Shrubs for Rhode Island*, Misc. Pub. 45. Extension Service, University of Rhode Island, Kingston.

South Carolina: *Familiar Trees of South Carolina*, Bul. 117. *Care of Ornamental Plants*, Circ. 430. Agricultural Publications Dept., The Clemson Agricultural College, Clemson.

Tennessee: *Better Home Grounds*, Pub. 196. *Home Grounds Improvement*, Pub. 329. Agricultural Extension Service, P.O. Box 1071, Knoxville.

Texas: *A Selected List of Woody Plants for Texas*, M-139. *Oleanders are Easy to Grow*, L-317. Extension Service, Texas A. and M., College Station.

Vermont: *Woody Ornamental Plants for Vermont*, Brieflet 879. *Beautifying the Home Grounds*, Circ. 93. Agricultural Extension Service, University of Vermont, Burlington.

Virginia: *Design of the Home Grounds*, Bul. 217. *Landscaping Slopes*, Circ. 622. Agricultural Extension Service, Virginia Polytechnic Institute, Blacksburg.

Washington: PNW Bulletins 8 and 16 (see Idaho). Extension Service, Pullman.

* * *

U.S. Dept. of Agriculture has a number of pamphlets on the subject of home landscaping. These are listed in *Popular Publications for the Farmer and Homeowner*, available free from Office of Information, U.S. Dept. of Agriculture, Washington 25, D.C.

Chevrolet



This year's *Chevrolet* exhibits a most startling and radical styling at the rear; the innovation, in the opinion of many critical consumers, detracts from the appearance of the car; it is sure to add greatly to the costs of repairing the effects of even minor bumps and abrasions. The most important improvement on the 1959 *Chevrolests* appears to be in the brakes. The brake lining area has been increased by about 16 percent and a cooling flange is added to the front brake drums (a similar flange was added to the rear drums during the 1958 model run and is continued this year). This change was adopted, no doubt, in an effort to deal with such difficulties as were experienced with 1958 *Chevrolests* by the Nebraska State Safety Patrol which found *Chevrolests* inadequate for the needs of its officers because of brake fade at high speeds. (Milwaukee, Wis., police officials had similar difficulties with *Chevrolet* brakes.)

The lowest priced *Chevrolet* series, the *Delray*, has been discontinued this year and the line now consists of the *Biscayne*, the *Bel Air*, and the *Impala*. Over-all lengths and widths have been increased by about 2 inches, to 211 inches and 80 inches, respectively, and the heights have been reduced by about an inch. Rated horsepower remain the same on the V-8's, but on the 6-cylinder engine the rated horsepower has been lowered from 145 to 135.

General comments

Entrance and exit into the 1959 *Chevrolests* was more difficult than in the 1958 models (true of 1959 models of most makes because of the lowered car height). Headroom and leg room were adequate except that headroom in the rear was scant for a tall person. The trunk space is large, but the

high lip (with a V shape, as seen from the rear) makes it difficult to load and unload the trunk (see Figure 2).

Safety

The hazard to children's fingers (see Figure 3, page 20) is the same on the *Chevrolet* as on some other cars, including *Buick*, *Oldsmobile*, *Plymouth*, and *Dodge*. With the low seats and a long flat hood there is a large area ahead of the car that cannot be seen by the driver. The inside rear-view mirror was considered too small to provide adequate rear vision. While no dangerous ornament is used on the hood, there are blunt-pointed ornaments on the front fenders that present a needless hazard to pedestrians. Reflections in the compound-curved windshield at night from the headlights of oncoming cars are annoying to the driver.

The rear doors can be locked from the inside so that operating the inside handle will not open them. The shift quadrant of the automatic transmission is not illuminated; absence of such lighting presents an unnecessary hazard, particularly for anyone driving the car who has not become familiar with its operation by considerable practice. Other controls are not well lighted. The speedometer and warning lights for battery and oil pressure are not clearly in view for some drivers, being obscured by the steering wheel. The heads of tall rear-seat passengers could be injured by striking the top of the rear window frame when the car is driven over a bad bump in the road.

Prices

The posted price of the *Impala* V-8 4-door sedan with accessories tested by CR was \$3384.10, itemized as follows: base price, \$2710 (*Bel Air*, \$2558; *Biscayne*, \$2419); heater, \$80.25; radio, \$84; *Powerglide*, \$199.10; oil filter, \$9.15; 2-speed windshield wiper, \$16.15; 2-tone paint, \$26.90; power steering, \$75.35; power brakes, \$43.05; 7.50 x 14 white sidewall tires, \$31.55; wheel disks, \$16.05; instrument panel pad, \$18.30; anti-freeze, \$5; freight, \$69.25.

Riding and handling qualities

The riding comfort of this car was judged inferior to that of the *Ford*, chiefly because the seats were not as comfortable (a fault that was very noticeable on a long trip). The ride was good on smooth roads, but on rough roads the seats did not appear to have enough spring action to absorb the shocks



Figure 1—Rear view of Chevrolet Impala.

Chevrolet specifications

| | Six | Standard V-8 | Optional V-8 |
|---|---|-----------------|-----------------|
| Engine | | | |
| Piston displacement, cubic inches | 235.5 | 283 | 348 |
| Rated horsepower at rpm. | 135 at 4000 | 185 at 4600 | 250 at 4400 |
| Compression ratio | 8.25 to 1 | 8.5 to 1 | 9.5 to 1 |
| Oil filter | Full flow (optional equipment) | | |
| Gasoline required | Regular | Regular | Premium |
| Cooling system capacity with heater, quarts | 18 | 18.5 | 22 |
| Taxable horsepower | 30.4 | 48 | 54.5 |
| Chassis and body (Biscayne, Bel Air, Impala, with 6 and V-8 engines) | | | |
| Wheelbase, inches | 119 | | |
| Over-all length, inches | 211 | | |
| Width, inches | 80 | | |
| Height, inches | 56 | | |
| Tires | 7.50 x 14 | | |
| Brake area, square inches | 186 | | |
| Minimum road clearance, inches | 6 | | |
| Turning diameter, feet | 40.8 | | |
| Steering wheel turns, full left to full right | 5.8 (5.2, with power steering) | | |
| Other details | | | |
| Battery | 12-volt 53-amp. -hr. (12-volt 61-amp. -hr. with optional V-8 engine) | | |
| Gasoline tank capacity, gallons | 20 | | |
| Curb weight of car tested, pounds | 3890 | | |
| Taxable weight, pounds | Approximately 3755 with automatic transmission | | |

transmitted to the body. The test car, which was equipped with power steering, handled and cornered very well. The *Powerglide* transmission operated satisfactorily.

Performance on road tests

Acceleration times were: from 0 to 60 miles per hour, 13.6 seconds; from 20 to 50, 7.6 sec.; from 40 to 60, 8.1 sec.; somewhat slower than last year's car (which was about 200 pounds lighter in weight, with engine of the same rated horsepower), but judged more than ample for any reasonable driving use.

Gasoline mileage under test conditions

At a constant speed of 50 miles per hour, the gasoline mileage was 16 miles per gallon (about 8 percent less than obtained on the 1958 model, and only slightly better than that of the *Ford V-8*). Over-all gasoline mileage on the road for the first 1200 miles was a little over 13 miles per gallon.

Speedometer and odometer errors

Both were about 5 percent fast.

Brakes

The power brakes with which this car was equipped performed very well. There was no abnormal



Figure 2—Trunk of the Impala.

brake fade in repeated stops from high speed. Additional tests on brake fade, engine braking, and octane requirements of the gasoline for *Chevrolet*, *Ford*, and *Plymouth* will be reported in a later issue.

Conclusions

In some respects, such as instrument panel layout, riding comfort, ease of entrance and exit, and gasoline mileage, the 1959 *Chevrolet* is judged less

desirable than the 1958 model; many will also feel that the complex radical treatment of the sheet metal at the rear puts the car at a disadvantage in repair costs and in probable turn-in values some years hence. The only really significant improvement in the 1959 *Chevrolet* appears to be in the brakes. Taking into consideration all factors in evidence at this time, Consumers' Research would definitely prefer the 1959 *Ford V-8* over the *Chevrolet V-8*.

Dodge Coronet

Dodge



IN outward appearance and design, the 1959 *Dodge* is pretty much last year's car with a "face lift"; but note that the lack of major change is not in itself a disadvantage from the consumer's point of view. The *Coronet V-8* uses a *Red Ram* engine of 326 cubic inches displacement rated at 255 horsepower, just about the same as last year's engine. The *Royal* uses a 295 horsepower engine compared to last year's 265 horsepower. The *Custom Royal* has a 361 cubic inch engine rated at 305 horsepower (last year's nominal horsepower was 295). Optional V-8 engines rated at 320 and 345 horsepower are available for all models. The six-cylinder 135-horsepower engine available on the *Coronet* is essentially the same as last year's. All passenger car models of the *Dodge* have an overall length of 217½ inches, an increase of 3½ inches over last year. The car tested by CR was a *Custom Royal 500* 4-door hardtop with one of the optional V-8 engines rated at 345 horsepower and *TorqueFlite* transmission.

A much advertised feature of Chrysler cars this year is the swiveling front seats, available at \$71 extra on the *Custom Royal Dodge* models. These seats were very effective in affording easy entrance and exit and also very comfortable, but it is too bad that manufacturers have followed each other like sheep in making their cars so low and difficult to enter an expensive accessory needs to be provided to compensate for the faults of the design. Entrance to the rear seat was difficult (swivel seats are not available for the rear compartment). Leg room was ample in this car, but headroom at the rear seat was limited.

The driver's outside mirror was well located and

its position could be controlled from inside the car, a good feature and a necessary addition for the *Dodge*, whose inside rear-view mirror is mounted on the top of the dash and is of little value with six people in the car because of its position and the fact that it vibrates with the motion of the car. The inside rear-view mirror was of the automatic beam-splitting type which CR considered a gadget and of little value. The air-leveling device with which the test car was equipped as an extra-cost option inflates air bladders to keep the car level when a heavy load is placed in the rear; it did not appear to improve the riding qualities of the car. The speed warning device has a bull's-eye which blinks when the preset speed is reached. The non-slip differential worked satisfactorily when tested on a sand-covered road.

Safety

The automatic transmission has no "Park" position; absence of a "Park" position introduces a definite hazard, if the hand brake is not kept in first-class adjustment. The absence of a good parking brake on the *Dodge* makes omission of a "Park" position especially undesirable. *Dodge* still uses the type of hand brake which acts on the drive shaft, a type CR considers a poor and unsafe design, and one that is almost useless as an emergency brake should the main service brakes fail (see among other references, the May 1957 BULLETIN). The fabric-covered dash pad has a sharp edge toward the driver, and the pad was judged to be of only limited value in case of a crash. The door center posts on the hardtop

Dodge specifications

| | Six | V-8 |
|---|---------------------|----------------------------------|
| Taxable horsepower | 25.3 | 49.9 (54.3) (57.8) |
| Taxable weight, pounds | 3475 | 3690 |
| Engine | | |
| Cylinder arrangement | 6, L-head | V-8, overhead valves |
| Piston displacement, cubic inches | 230 | 361 (383) |
| Rated maximum horsepower | 135 | 255, 295, 305 (320 or 345)† |
| Compression ratio | 8.0 to 1 | 9.2 to 1, 10.1 to 1 (10.0 to 1)† |
| Oil filter | By-pass | Full flow |
| Grade of gasoline required | Regular | Premium |
| Cooling system capacity with heater, quarts | 14 | 17 |
| Chassis and body | | |
| Wheelbase, inches | 122 | |
| Over-all length, inches | 217.5 | |
| Width, inches | 80.0 | |
| Height, Inches | 54.3 | |
| Tires | 8.00 x 14* | |
| Brake area, square inches | 207 | |
| Minimum road clearance, inches | 5.5 | |
| Turning diameter, feet | 43.5 | |
| Steering wheel turns, full left to full right | 5.2 (3.5, power) | |
| Other details | | |
| Battery | 12-volt 50-amp.-hr. | 12-volt 60-amp.-hr. |
| Gasoline tank capacity, gallons | 20 | |
| Curb weight of car tested, pounds | 4315 | |

†Figures in parentheses are for optional D-500 and Super D-500 engines.
*8.50 x 14 tires on car tested.

model were a hazard to the fingers of children (as on several other cars). There was pronounced reflection of glare from the instrument cluster in daylight. A good feature of the car is the use of an oil pressure gauge and ammeter instead of the less desirable indicating lights. Another is the rear red lights which are clearly visible from the side. The electric windshield wipers did a poor job at speeds of 55 miles per hour and up, and even in a moderate rain, vision was obscured to a dangerous degree. All the recent strongly curved windshields are difficult to keep clean, but the Dodge was found to be worse in this respect than other new cars tested to date.

Riding and handling qualities

While the manufacturer claims the torsion bar suspension has been improved by using shorter

and slightly thinner bars, no detectable improvement in the ride over last year's, which was good, was noted. On rough roads a rumble was transmitted to the car interior which was somewhat disconcerting. The car cornered well. The power steering was considered too fast (3½ turns of the steering wheel from full right to full left).

Performance on road tests

The acceleration time of this car from 40 to 60 miles per hour was in the same class as Buick and Oldsmobile, 4.5 seconds, an acceleration rate that is entirely too fast for the skill and discretion of the average driver.

At a constant speed of 50 miles per hour, the gasoline mileage was 15.5 miles per gallon, which was not good in comparison with other cars in the Dodge price class.



Figure 3—When the front door is open, a space is exposed between the door and a sharp edge of the door post. If a small child standing outside the car should put his fingers or hand into the opening and someone should then open the rear door (at the left in the picture)—an action that will close the space seen in the picture—the child's (or an adult's) fingers could be badly hurt, perhaps permanently maimed. The car pictured is a Chevrolet, but the hazard is the same on a number of other makes including Buick, Oldsmobile, Plymouth, and Dodge.

Speedometer errors

Indicated speed, m.p.h. 30 50 60
Actual speed, m.p.h. 31 52 62
(It is unusual to find a speedometer indicating speeds slower than actual speed.)

Odometer was about 3 percent fast.

Brakes

The brakes on this car were not as good as those of Buick or Oldsmobile. Strong pressure on the power brakes was required after the sixth stop from 70 miles per hour, and the time taken to bring the car to rest at the tenth stop was approximately twice that for the first stop.

Prices

By grouping several items together under such terms as convenience group, appearance group, safety group, etc., Dodge dealers are able to load

the cars with factory-installed accessories which the customers may not want. For example, the so-called safety group includes power steering, power brakes, padded instrument panel, padded sun visors, and speed warning device. While these items are not itemized on the price lists posted on the cars by the manufacturers, dealers themselves (at least in our part of New Jersey) are adding a breakdown of the various groups on a separate sheet and posting them on the cars.

The total price of the Dodge Custom Royal 4-door hardtop with accessories was \$4769.85, itemized as follows: factory-suggested base price, \$3279.25 (Custom Royal 4-door sedan is \$134.50 less); "deluxe radio and heater group," \$221.65; "safety group," \$170 (should a "safety-group," so-called, be charged for as an extra, on any car?); appearance group, \$42.65; convenience group, \$30.50; D-500 engine with TorqueFlite automatic transmission, \$304.15; Level-Flite, \$127.55; power seat, \$95.70; power window lifts, \$102.30; swivel seats, \$70.95; rear radio speaker, \$14.95; Sure-Grip differential, \$49.70; "deluxe" 2-tone paint, \$34.10; hood ornament, \$5.80; quarter panel chevrons, \$8.60; Solex (tinted) windshield, \$18.55; foam-rubber header liner, \$14.30; undercoating and hood fiber glass, \$12.85; white sidewall tires, \$63.95; rear license plate frame, \$3.60; antifreeze, \$5.75; destination (freight) charge, \$93.

Conclusions

The Dodge Custom Royal appears to be just another good automobile with no clearly outstanding features of performance or safety. The relatively low gasoline mileage of the car tested, with the 345 horsepower engine, will tend to eliminate it from consideration by those interested in economy in driving. The test car was loaded with accessories; CR does not recommend the purchase of power windows, power seats, automatic beam-splitting mirror, as they are likely to give trouble and may require expensive servicing. The optional hood ornament was of a dangerous type and should not be purchased.

Studebaker Lark

THIS new small car, like American Motors' Rambler and Rambler American, has solid virtues which are lacking in most other American cars, namely simple, non-florid body design, moderate horsepower, fairly economical in consumption of gasoline, and a reasonable length, about 3 feet shorter than Ford, Plymouth, and Chevrolet, 16 inches shorter than the Rambler. The Lark is about 3 inches shorter than the Rambler American. Conservatively styled and large enough to seat six in

comfort, the Lark should meet the needs of average American drivers who are interested in a small car better adapted for their use than most of the small low-priced foreign imports.

The Lark's main drawback is its price. The lowest-priced 4-door sedan, Lark De Luxe 6, sells for only about \$300 less than the lowest-priced Chevrolet 6-cylinder 4-door sedan, and about \$100 less than the lowest-priced Rambler. The Rambler American is not made in a 4-door sedan model,

Studebaker Lark specifications

| | Six | V-8 |
|---|------------|---------------------|
| Taxable horsepower | 21.6 | 40.6 |
| Taxable weight, pounds | 2600 | 2925 |
| Engine | | |
| Piston displacement, cubic inches | 169.6 | 259.2 |
| Rated maximum horsepower at stated rpm. | 90 at 4000 | 180 at 4500 |
| Compression ratio | 8.3 to 1 | 8.8 to 1 |
| Oil filter | | Partial flow |
| Grade of gasoline required | | Regular |
| Cooling system capacity with heater, quarts | 12 | 18 |
| Chassis and body | | |
| Wheelbase, inches | | 108.5 |
| Over-all length, inches | | 175 |
| Width, inches | | 71.4 |
| Height, inches | | 57.5 |
| Tires | | 5.90 x 15 |
| Minimum road clearance, inches | | 6.1 |
| Turning diameter, feet | | 37.5 |
| Steering wheel turns, full left to full right | 5 | 4.5 |
| Other details | | |
| Battery | | 12-volt 50-amp.-hr. |
| Gasoline tank capacity, gallons | | 18 |
| Windshield wipers | | Electric, two-speed |
| Curb weight of car tested, pounds | 2830 | — |

but its deluxe 2-door sedan model sells for about \$100 less than the corresponding model of the *Lark*. High labor costs in comparison to the labor costs of foreign car manufacturers make it impossible for American manufacturers to produce a small car that can compete in price with foreign imports, unless they strip it down to the barest essentials. We are certain that such a car, if offered, would have only limited sales, for the great majority of Americans, prone to keep up with the Joneses, have pretty clearly demonstrated their preference for luxury features, including expensive body designs and trim, fancy bumpers, gaudy instrument arrays and many other things that make a car expensive to build and to maintain.

The *Lark* appears to be an excellent compromise; its instrument panel is plain, simple, but practical, and much to be preferred to some of the gaudy, complicated, and confusing galaxies of meters and lights found in many of the larger

over-chromed American cars; the *Lark* does not have the dual headlights currently in vogue; it does have removable fender panels, which should greatly reduce the costs of repairing damages caused in minor accidents.

The six-cylinder engine is rated at 90 horsepower at 4000 revolutions per minute (which is adequate). The V-8 engine, available at about \$135 extra, is rated at 180 horsepower at 4500 revolutions per minute.

General comments

Headroom and leg room in the front were adequate, but in the rear, leg room, particularly with the front seat all the way back, was insufficient for a tall person; headroom in the rear was also scant for a tall person. While trunk space was adequate—about 12½ cubic feet—the spare tire was mounted flat on the floor and was thus not conveniently accessible when the trunk was loaded with baggage or other heavy articles.



Studebaker Lark Six

Indicating lights were used instead of the more desirable ammeter and oil-pressure gauges. The front vent windows were not crank operated (not a disadvantage); there were no vent panes in the rear.

Safety

There was little to criticize on this car from the safety standpoint, as compared with other popular American cars. There were no dangerous hood ornaments or projections. The lower portion of the instrument panel was padded for a degree of protection of the knees (this padding is "standard equipment" on the *Regal* models). There were some annoying reflections from the chrome on the steering wheel from the sun. The fresh-air intake was located low at the front of the car, an undesirable position, as exhaust gas fumes from the car ahead could be readily picked up and circulated in the car.

Prices

The test car, a *Regal 6* 4-door sedan with a 4.1 to 1 rear axle ratio and overdrive, had a posted price of \$2648.08, itemized as follows: factory list, \$2175 (*De Luxe 6* is \$180 less); radio, \$60.50; antenna, \$6.25; heater, \$71; overdrive transmission, \$110.40; white sidewall tires, \$28.45; back-up lights, \$8; bumper guards, \$20; reclining front seat, \$37.66; wheel disks, \$17.15; undercoating, \$15.90; anti-freeze, \$5.25; distribution and delivery, \$92.52.

Riding and handling qualities

The *Lark* gave a firm, satisfactory ride on all types of roads. The seats were very comfortable and placed high enough above the road surface that even a tall person had no difficulty in entering or leaving the car. The drive shaft tunnel is not high; thus the seat cushions at center portions of the seats are not skimmed, and the center passengers can ride in comfort (not true of most other American cars). The car cornered and handled well, except that the steering was somewhat hard.

Performance on road tests

Acceleration times were: from 0 to 60 miles per hour, 25.4 seconds; from 20 to 50, 15.7 sec.; from 40 to 60, 15.1 sec. At the low end of the scale of acceleration for U.S.-made cars, and not as fast as the 1958 *Rambler American*, but ample for the conservative driver and faster in acceleration than most of the low priced foreign cars tested by CR.

Gasoline mileage under test conditions

At a constant speed of 50 miles per hour in overdrive, the *Lark* gave 22.5 miles per gallon; with overdrive locked out (operating in third gear), 17.2 miles per gallon. Not as good as the 1958 *Rambler American* reported in the December 1958 BULLETIN. The 1959 *Rambler American*, not yet tested, should give better gasoline mileage than the 1958 because of the more favorable rear-axle ratio on the '59.

Speedometer errors

Speedometer was about 12 percent fast. The odometer was about 5 percent fast.

Conclusions

The *Lark* is a well-built car of good common-sense design which should appeal to many. Unfortunately its price is likely to be considered too high by those shopping for economical transportation, particularly as its miles-per-gallon performance is not high enough to effect substantial savings in operating costs.

Vibrator-powered hand sprayers

MOST of the popular "home mechanics" magazines and Sunday newspaper merchandise bargain pages carry advertisements from time to time for paint and insecticide sprayers. Some of the devices pictured in the ads employ a motor and compressor with a tube connected to a spray gun, and are essentially low-cost versions of a long-popular type of commercial sprayers. Many of the others

selling in a price range from \$6 to \$20 are little more than vibrating short-stroke-pump mechanisms powered by a kind of low-cost electric "motor" with a vibrating armature.

The usefulness of a spray device of the latter type is limited basically by its design, and few persons who attempt to spray-paint a chair or table with such a sprayer, for example, are likely



to be satisfied with the job. As a dispenser of garden spray insecticide solutions, however, a use for which careful control of the spray pattern is not required, it did seem possible that such a device might prove very useful to the home gardener. Last year, therefore, Consumers' Research purchased and tested two different brands of sprayers which were widely advertised. The following ratings and conclusions are based upon those tests.

B. Intermediate

BVI Spray-Miser, Model VS-651 (Advertised by John H. Fair Co., Grayslake, Ill.; mfd. by Burgess Vibrocrafters, Inc., Grayslake, Ill.) \$14.95, postpaid. Weight, 4.2 lb., when spray jar is filled with spray solution. Electric cord length, 7½ ft. Sprayer functioned satisfactorily when liquid solutions (emulsions) of nicotine sulfate, 2,4-D, etc., were sprayed; with hand-mixed solutions of dry-powder insecticides such as lead arsenate and Bordeaux mixture, thorough mixing and straining were desirable for satisfactory operation. The sprayer, pump, and nozzle should be well cleaned after each use, as is called for by the instructions. The amateur horticulturist will find the *Spray-Miser* a convenient replacement for a small, hand-pumped spray gun. It is not a substitute for a 1- to 2-gal. hose-type sprayer, however, because the *Spray-Miser* is best used only about 1 ft. from foliage, and must be held in the hand. Thus proper spraying of large bushes and small fruit trees could not be accomplished readily. It will take a long time to spray a large bush with the *Spray-Miser*, too, because the spraying rate is low—about 2 fl. oz. of solution per minute. (Corresponds to a 1-gal. sprayer of the usual farm and home garden type, taking about 1 hr. to spray 1 gal. of insecticide with continuous spraying.) The small, 25-oz. capacity offers the advantage of relatively light weight and adaptability to the small amounts of spray solutions often needed in caring for home gardens. The *Spray-Miser* model tested did not carry a UL label, but was listed by that organization. When tested, it passed CR's test for electrical safety, as well as a 30-hr. life test with intermittent on-off operation. There was some slight leakage of solution into the head of the unit, and we believe that after long use a hazard such as found in the *Z and W* sprayer described below might develop.

C. Not Recommended

Z and W Handi Sprayer, Model 4100 (Purchased from Lafayette Radio, Jamaica 33, N. Y.) \$6.25, plus postage. Also seen advertised as an "Amazing Bargain" from Thoresen, Inc., 585 Water St., New York 2, at \$7.99. Claimed to be suitable for spraying either paint or insecticides. The *Z and W Handi Sprayer* was found unsatisfactory for use in spraying paint, and it stopped working completely after two hours of intermittent use spraying clean tap water. It was found that, in actual use, with an insecticide dissolved in water, or other water solution, the device presented a grave electrical hazard. Because of poor design and inadequacy of the seal between the pumping mechanism and the compartment which enclosed the vibrator motor and open contact switch, spray solution leaked into the compartment and also wet the user's hand. If this should happen when spraying an electrically conductive spray solution (tap water and many solutions are conductive), a severe shock may be experienced, a fact which one of CR's engineers is in a position to confirm. We would doubt that a device of this type would be fully safe to use even if rubber gloves and rubber shoes were worn.

* * *

There have been a number of other sprayers of this general sort advertised for mail-order selling. We would not advise that any of them be purchased except upon a strict money-back-if-not-satisfied basis. (Even then there's a risk of being stuck, since you may have trouble getting your money back, and there's the problem of writing letters, packing and shipping the appliance, paying the 30-cents-plus-postage charge for certified, return-receipt letters demanding refund, and paying postage and insurance on the appliance itself.)

Among the paint sprayers employing a vibrator-type motor previously tested by Consumers' Research and found unsuitable is the following:

Super Jet Spray Gun (Power Products, Inc., 175 E. 87, New York 28) \$29.95 for a kit, including spray gun and various accessories. Each of three samples failed in endurance tests, and one showed very high shock hazard on failure. cr55

Arsenic in cigarettes

Three domestic brands made with Turkish tobaccos were found to be low in arsenic

THE consumption of cigarettes per person over 15 years of age in the U.S. rose to an all-time high in 1958, reaching nearly 3600 cigarettes per person per year, a total of about 430 billion cigarettes. As cigarette smoking increases, the evidence accumulates that this habit is harmful to health and shortens life. At the Seventh International Cancer Congress, last July in London, a statistical expert presented a summary of a study involving the smoking habits and the death rates of some 200,000 American war veterans. As many similar studies have indicated, this major investigation showed that cigarette smokers run about a 10 times greater risk of dying from lung cancer than do non-smokers. (Cancer of the lung and associated parts of the respiratory system is sharply on the increase, especially among men, and currently accounts for about 20 percent of all male deaths from cancer in the United States.) Overall, persons who regularly smoked only cigarettes had a death rate close to 60 percent higher than non-smokers.

As previously reported by Consumers' Research, a person smoking two packs a day has a 70 times greater chance of developing lung cancer than a non-smoker; one in 8 to 10 men smoking that much can expect to die of lung cancer.

A number of components of cigarettes and cigarette smoke are suspected of playing a part in the serious effect that cigarette smoking clearly has in causing illness and death. Nicotine and "tars" are frequently mentioned. Consumers' Research believes that their importance, at least so far as lung cancer is concerned, may have been greatly overemphasized in popular magazines and especially in newspaper advertising. There seems reason to believe that the effects of nicotine may be involved in cardiovascular diseases, but the importance of the substances known collectively as "tar" is less well established. The measurement of these substances and the ranking of cigarettes in accordance with the amounts found is a largely profitless operation, especially since the quantities do not in general vary by large amounts among the popular brands of cigarettes of the same general kind. Such differences as do occur may very often be "happenstance," because cigarette makers buy their tobaccos, produced under a variety of weather and soil conditions, from a large number of different growers.

One and only one substance found in cigarettes is *known* (as "tar" and nicotine are not) to be cancer-causing to humans. This is arsenic. That arsenic can cause or help to cause cancer in man is well established. The effects of repeated contacts are cumulative, and cancerous growths attributable to arsenic may sometimes appear many years after exposure. About one eighth of the arsenic in the smoked portion of a cigarette is drawn into the smoker's body. The amount of arsenic thus taken into the body by a heavy smoker is not trifling, but substantial—comparable, over a relatively short period, with amounts that can cause actual toxic effects.

Several brands of cigarettes made and distributed in the United States are promoted as Turkish, Egyptian, or other Near-Eastern types. In view of the previous findings (see March 1958 BULLETIN) that *imported* Turkish-type cigarettes were very low in arsenic, readers were interested in knowing whether domestic brands which are offered as being made from imported Turkish tobacco were also highly favorable from the standpoint of arsenic content. Incidentally, the term "Turkish" as applied to tobacco does not refer only to tobacco grown in Turkey, but in general to an aromatic type of tobacco characteristic of Greece, Syria, and other areas of the Near East, as well as Turkey.

The brands most recently tested were *Helmar* and *Murad*, which are made by P. Lorillard Co., and *Melachrino*, a product of the American Tobacco Company. Each of these is marketed in a package of exotic appearance, with the foreign-sounding name emphasized. According to their makers, *Melachrinos* and *Murads* contain Turkish tobaccos only, while *Helmars* include American varieties *with* the Turkish. (The *Helmar* package bears no indication of this fact.)

Analysis of these brands for arsenic shows them to be pretty much on a par as to arsenic content, but they contain much *less* arsenic than the popular American brands previously tested; on the other hand they do contain considerably more than the *imported* Near-East brands included in CR's previous report. The accompanying table shows the arsenic content found in samples of *Helmar*, *Melachrino*, and *Murad* cigarettes, and gives the earlier data about domestic and imported brands for convenient comparison.

ARSENIC CONTENT OF CIGARETTES

in micrograms of arsenic per gram of cigarette*
(excluding filter tip, if any)

| AMERICAN BRANDS WITH TURKISH TOBACCO | |
|---|------|
| Helmar (contains some American tobaccos)..... | 1.5 |
| Melachrino..... | 1.4 |
| Murad..... | 1.1 |
| IMPORTED NEAR-EAST BRANDS | |
| Abdullah & Co., Ltd., "Turkish No. 11"..... | .01 |
| Ed. Laurens, "Le Khedive"..... | none |
| Hellas No. 1..... | none |
| POPULAR AMERICAN BRANDS | |
| Camel..... | 15 |
| Chesterfield..... | 19 |
| L & M..... | 23 |
| Lucky Strike..... | 19 |
| Marlboro..... | 10 |
| Pall Mall..... | 15 |
| Philip Morris..... | 20 |
| Viceroy..... | 5 |
| Winston..... | 17 |

* A "regular" size cigarette weighs roughly one gram. A microgram is one millionth of a gram; a gram is about 1/28 of an ounce.
For these determinations of arsenic content, the cigarettes were pre-treated or "digested" in acid in accordance with a method developed by C. C. Cassil of the U. S. Department of Agriculture.

The brands in each group are listed alphabetically, rather than in order of arsenic content, because it is felt that the differences among brands of the same tobacco type are not of any great significance. The important fact to be learned from the table is that tobacco grown in the United States contains a *much* larger proportion of arsenic than does tobacco from the Near East.

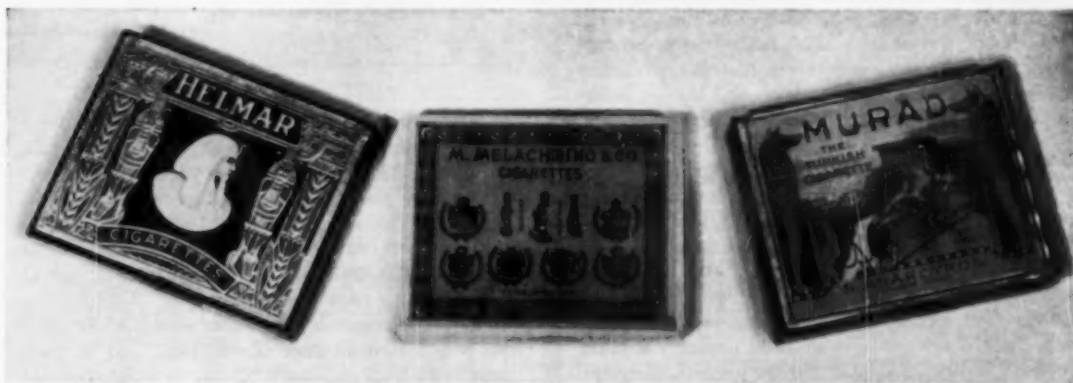
The problem of arsenic in cigarettes and its possible relationship to cancer of the lung was discussed before the International Cancer Congress by Dr. Robert H. Holland, reporting the work done by himself and other scientists associated with the Veterans Administration Hospital and the Southwestern Medical School in Dallas, Texas. These researchers measured the arsenic content of popular American cigarettes, and of

domestic cigarettes made from Turkish tobaccos. A closed-bomb combustion method of preparing samples was used, which is said to avoid some loss of arsenic which may occur in less refined analytical methods generally employed.

The average arsenic content in five (unnamed) domestic brands as determined by the bomb-combustion method was approximately twice the average for nine popular domestic brands as reported by Consumers' Research. Dr. Holland's report confirms that our results are of the correct order of magnitude, and we are confident that our figures reflect with fairly good accuracy the *relative* amounts of arsenic in the samples tested.

Comparison of Dr. Holland's data with measurements made nearly 30 years ago by Dr. Henry S. Satterlee and associates, using the same bomb-combustion method (which was originated by Satterlee), indicates that the arsenic content of American tobacco *has been on the increase* during this period, a truly disturbing situation. The reasons for an increase in arsenic content are not clear. Although CR had believed that arsenical pesticides were largely superseded on the tobacco plantations by organic bug killers as long ago as about 1947, we have recently seen evidence to the contrary. According to a 1958 bulletin of the Agricultural Experiment Station of the University of Kentucky, arsenate of lead and Paris green were being used on tobacco fields in 1951, at least in some areas, in quantities of 17½ pounds per acre. We do not doubt that this practice may perhaps have continued right up to the present, or that the effect of arsenic additions to the soil made for many years up to and through 1951 are still producing their undesirable effects on the tobacco.

In any event, the presence of arsenic in cigarettes is a problem that calls for further investigation and attack by research organizations and by federal and state authorities concerned with preventing the contamination of plant products that may affect the health of human beings.





Color film *Recommendations for choice of film and filters, the meaning of ASA exposure index numbers, and guide numbers for flash photos*

IF YOU ARE confused about which types of color film to use, and which types of filters to use with them in taking pictures by daylight, flash, and photoflood, you can count yourself as one of a very large majority of amateur photographers. The situation is a most complicated one, made so not only by the number of different types of film available but by the fact that instructions and recommendations issued by the film and filter manufacturers show important inconsistencies and are constantly under revision. It is not at all uncommon to find contradictory recommendations given in reference literature from different sources, or even, at times, from the same source.

In general, the *instruction sheets that accompany the film* are the most dependable, as they are revised more frequently, and when there is any doubt, the information on these instruction sheets should be used in preference to the books, pamphlets, and leaflets available at the dealers' stores.

For anyone but a real devotee of the art, much of the pleasure is taken from photography when it is necessary to carry around and consult a large number of data sheets before taking a colored or black-and-white picture. Even with a wealth of reference material and time to study it, the amateur will often find it impossible to be sure he has reached a correct judgment as to the type of film, filter, flash bulb, or colored protective hood for flash bulbs he should use for a given purpose.

The taking of good color pictures nowadays often involves rather complex considerations and special equipment, and the problem is particularly difficult and annoying to persons who just want good pictures and do not care to master the considerable background knowledge possessed by the expert and the enthusiastic, all-out amateur. The accompanying article seeks to resolve some of the difficulties and to make it possible to choose film and filters wisely with a minimum of time and study, and without waste of money in unprofitable experimentation.

Consumers' Research has studied a wide range of the available data and condensed these into a simplified table which provides the most essential information needed, information which can be easily understood and followed by any amateur photographer, who may wish to clip the table from the BULLETIN and carry it in pocketbook or gadget bag for easy reference.

The *ASA index* is a number assigned to each film which is indicative of its speed. It is used, usually with an exposure meter, to determine the

approximate exposure under daylight or photoflood lighting. The *guide number*, which depends on the type of film and also on the type and size of flash bulb and the shutter speed used, is the basis for selecting stop openings in flash bulb photography. The guide number divided by the distance of the camera from the subject in feet gives the stop opening to which the lens should be set for use with flash bulbs at a shutter speed of 1/25 second.

Choice between brands

The choice between *Anscochrome*, *Ektachrome*, and *Kodachrome* is largely one of personal preference.

Anscochrome and *Super Anscochrome* give soft gradation with good detail in highlights and shadows. *Super Anscochrome* has the great advantage of phenomenal speed, higher, indeed, than many black-and-white films in common use; this high speed greatly extends the field possible for color photography, and permits taking good pictures with shadow detail where strong sunlight and deep shadows are present in the same scene.

Kodachrome has outstandingly fine grain, permitting sharp projected images of large size. *Kodachrome* gives colder tones, with the greatest brilliance in the blues and greens. *Ektachrome* has a less fine grain than *Kodachrome* and gives warmer tones with emphasis of the yellow and red portions of the color scale. *Ektachrome* and *Anscochrome* have an important advantage in that each is about three times as fast as *Kodachrome*, and *Super Anscochrome* is about ten times as fast as *Kodachrome* (but 20 percent higher in price). The higher speed films permit the use of smaller diaphragm openings or faster shutter speeds, often very advantageous, and of course permit taking satisfactory pictures in poor lighting conditions or where there is fast movement; in both these conditions, *Kodachrome* is of little value, since its use is limited often to slow exposures, 1/25 or 1/50 second, and large lens openings, and to scenes where light is bright and fairly uniform.

Choice between types

To obtain the best possible results with color film, each of the several types should be used with

FILTER RECOMMENDATIONS FOR COLOR FILM

| Kind of film | Daylight | | Flash | | | | Photoflood | |
|---|-----------|---------|-----------------|-------------|--------------------|------------|------------|--------|
| | | | Bulb | | | Electronic | | |
| | ASA index | Filter | Guide number[1] | Filter | Type of flash lamp | Filter | ASA index | Filter |
| Outdoor lighting | | | | | | | | |
| <i>Anscochrome</i> | 32 | None | 95 | None | Blue | 81A | 12 | 80B |
| <i>Super Anscochrome</i> | 100 | None | 170 | None | Blue | 81A | 40 | 80B |
| <i>Ektachrome</i> | 32 | None | 90 | 80C None | Clear Blue | None | 12 | 80B |
| <i>Kodachrome</i> | 10 | None[2] | 50 | 80C None | Clear Blue | None | 5 | 80B |
| Indoor lighting | | | | | | | | |
| <i>Anscochrome Type F</i> | 25 | 85C | 125 | None | Clear | NR | 20 | 82A |
| <i>Super Anscochrome, Tungsten</i> | 80 | 85B | 220 | 81D | Clear | NR | 100 | 81A |
| <i>Ektachrome Type F</i> | 16 | 85C | 120 | None | Clear[3] | NR | 16 | 82A |
| <i>Kodachrome Type F</i> | 10 | 85C | 95 | None | Clear[3] | NR | 12 | 82A |
| <i>Kodachrome Professional Type A</i> [4] | 10 | 85 | 80 | 81C[5] | Clear | NR | 16 | None |
| Indoor or outdoor lighting | | | | | | | | |
| <i>Kodacolor C</i> [6] | 32 | None | 120 | None | Clear Blue[7] | 85 | 20 | 82A |

NR—The film named is not recommended with this lighting.

[1] With No. 5 or 25 bulbs at 1/25 second.

[2] *Kodak Skylight* filter 1A can be used to warm up tones (reduce bluishness in shadows).

[3] With SM or SF lamps, 82B filter.

[4] Available only in 36-exposure rolls.

[5] The 81C filter should not be used with SM or SF bulbs.

[6] With *Kodacolor C*, no filters are normally required for daylight or flash bulb pictures; the necessary corrective action is taken in the processing.

[7] For 611-in flash outdoors.

the light sources for which it is designed: outdoor film for daylight, *Type F* film with clear wire-filled flash bulbs, and *Type A* film with tungsten photoflood lights. Most amateurs, however, need at times to be able to take pictures under a variety of conditions, using the same type of film; thus they may want to take flash pictures when their camera is loaded with outdoor film or outdoor pictures when the camera is loaded with indoor film. Only a few enthusiasts are likely to carry two cameras with them, one loaded with each type of film.

One type of film can be used indoors and outdoors with the correct filter or flash bulb and give acceptable results (though not quite as good in color rendition as the results to be achieved when the outdoor type of film is used outdoors, and indoor film for indoor pictures). Where film speed is important—and it usually is for anyone who needs to take pictures indoors from time to time—it is better to use *Type F Anscochrome*, *Kodachrome*, or *Ektachrome* indoor film for both indoor and outdoor exposures, as the loss of film speed is less than when daylight film is used indoors with the needed conversion filter. (This rule does not apply to *Super Anscochrome*, for although the daylight type is somewhat faster than the tungsten type, both are very fast films and more than adequate in speed for the needs of the average user, so that with *Super Anscochrome*, the daylight type should be used if most of the pictures will be taken outdoors or tungsten type if most of the exposures will be with flash.)

Blue flash bulbs vs. clear flash with filter

It will be noted in the table that in using *outdoor Ektachrome* or *Kodachrome* with flash, either blue flash lamps or clear flash bulbs with a No. 80C filter on the camera lens can be used; with both methods the same guide number applies (effective speed). For most purposes, equivalent results will be obtained with either method. An exception arises when one is using flash to reduce lighting contrast in sunlit outdoor scenes; for this type of exposure, a blue-flash lamp or blue filter over the flash bulb *must* be used (without any filter on the lens) rather than a clear flash bulb with the 80C filter over the lens. For general purposes and when many pictures are to be taken, it is better to use clear flash bulbs with an 80C conversion filter over the lens, because clear bulbs are cheaper (blue flash bulbs cost 2 cents extra, and it is a bother to carry two types of bulbs) and because the density and filtering effect of the blue coating of the flash bulbs may vary considerably from batch to batch and between different makes.

Electronic flash

The color quality of light from an *electronic flash* closely approximates that of daylight. An electronic flash unit can therefore usually be employed with daylight-type color film without need to use any filter. If the transparencies are too blue, which sometimes happens when the flash tubes are new, an 81A filter, which requires about 1/3 stop increase in exposure, should be used. With *Kodacolor* film, a No. 85 filter should be used when the only light source for a picture is electronic flash. Guide numbers advertised for electronic flash are likely to be exaggerated. For information on how to determine the proper guide number for your own electronic flash unit, see Eastman Kodak Pamphlet C-37, *Exposure with Portable Electronic Flash Units*. Electronic flash has the advantage of permitting the taking of objects in rapid motion as the duration of the flash is only 1/500 to 1/1000 second.

Fluorescent lighting

No instructions can be given that would be easy to follow for photographing with correct color rendition interior scenes lighted by fluorescent lamps, for such lamps do not have a simple continuous spectrum. Considerable experimenting is necessary using combinations of color compensating filters to absorb the excessive blue and green present with this type of lighting, if acceptable results are to be obtained. Information on taking pictures under fluorescent lamps can be gotten from leading manufacturers of photographic filters.

Ordinary artificial lighting

None of the usual types of lamps for indoor lighting (the usual incandescent bulbs) are at all suited for photographing with indoor or outdoor color film. See the table for correct mode of lighting for pictures to be taken indoors.

* * *

The person who does not want to spend a lot of time and study in photography will do well to select one or at most two types and makes of color film, filters, and flash bulbs, and stick with them. Every change from one make or type to another presents problems and may mean unsatisfactory pictures for a time. It is better to master one or at most two types of color film than to attempt to work with several; thus one gains a degree of certainty and dependability that will be lacking when one follows the advice of friends or of a dealer and changes from time to time to a different kind of film, filter, or source of flash illumination.

Tests of toothbrushes

TOOTHBRUSHES, used for some 200 years, are primarily cosmetic devices. They are used to enhance the appearance and "to promote cleanliness of the teeth and oral cavity," according to the American Dental Association. People as a whole take a sensible interest in keeping their teeth clean. A limited survey of 288 women made by the duPont Company a few years ago showed that 45 percent of the families had one toothbrush per person, 55 percent more than one each.

The preservation of the teeth is actually largely a matter of diet and adequate dental care, not of toothbrushes or dentifrices. Furthermore, it is only in the very narrow sense true that a clean tooth never decays; everything, of course, depends on just what is meant by the word "clean." Studies have shown that the surfaces of the teeth that are adequately cleaned are those readily accessible to the brush, and they are the surfaces where decay does not ordinarily occur, whether the teeth are brushed or not.

Factors which determine the effectiveness of a brush, according to the American Dental Association, include size and shape—which should be such that the brush may be easily manipulated to be efficient in removal of food debris from the teeth—and the characteristics of the bristles. A brush should also be light in weight, sufficiently strong, and easily cleaned and aired.

For general use by adults, toothbrush designs incorporating an approximately straight handle with a comparatively small brush head (1 to 1¼ inches long and 5/16 to ¾ inch wide) are suggested by the American Dental Association. (See illustration.) It is recognized, however, that toothbrushes of widely different designs will be entirely satisfactory in individual cases.

One of the most important requirements of a toothbrush, at least as important as the size and shape, is that the bristles should be suitable. Dentists Benedict B. Kimmelman and Gustav C. Tassman reported in an article published in the *Journal of the Albert Einstein Medical Center*, of



For general adult use, the straight-trimmed straight-handled brush with comparatively small brushing surface (1 to 1¼ inches long, 5/16 to ¾ inch wide) probably combines as successfully as any other the advantages of easy manipulation, efficiency, cleanability, and structural simplicity, according to the American Dental Association. Brushes of this general size and shape are characterized in CR's listings as "good" in these respects.

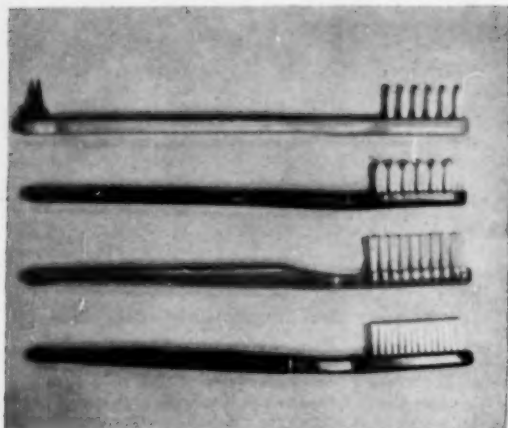


In this motor-driven machine, each brush is rubbed back and forth against simulated "teeth," using a force of one-half pound, which was judged to be about the force used by an adult in brushing his teeth. In the test reported, the bristles were given up to 416,000 strokes against the "teeth" (208,000 complete back and forth cycles). During the test a small quantity of water and tooth paste mixture was regularly applied to each brush. Each brush is enclosed in a box and any bristles or bits of bristles that break or fall out are retained in the box where they may be seen and counted.

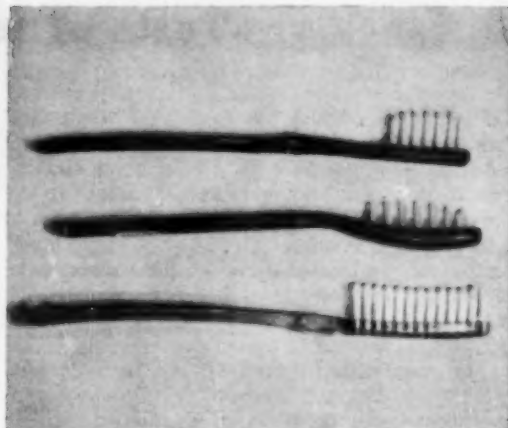
Philadelphia, December 1957, that soft-textured brushes reach more areas of deposits on the tooth surfaces, but do not fully penetrate large parts of the areas. They found that hard brushes, on the other hand, failed to reach some areas, but more effectively penetrated or removed deposits on the surfaces which they did reach. Medium-textured brushes were generally more effective than hard ones in reaching tooth areas, and almost equally effective in penetrating the deposits on the teeth, the researchers reported.

The toothbrushes bought for the study made by Consumers' Research were all sold as having bristles of "medium" stiffness, except for two, the *Rexall De Luxe*, which was not characterized on the package or on the brush, and *Pro Double Duty*, which had stiff blue bristles in the center and somewhat less stiff white bristles on the outside. The terms "hard," "medium," and "soft," as applied to toothbrushes, however, do not have any universally accepted meaning. Thus, the "medium" bristles of one brand may be considerably stiffer than the "medium" bristles of another brand. It has been found, indeed, that medium bristles of one brand are sometimes even stiffer than "hard" bristles of the same or other brands. All of the brushes tested had synthetic bristles, except the *Lactona No. 12* and *No. 18*. These two had natural bristles.

That there are real differences in bristles with respect to durability may be seen in the results of the latest tests conducted by Consumers' Research, which included 15 brands. Testing for durability was done on a special mechanical device designed by Consumers' Research and built under our direction. (See illustration above.)



All favorable shapes, according to criteria published by the American Dental Association. From top to bottom: Pyco-pay, Pepsodent, Tek DeLuxe, Rexall De Luxe.



Shapes of these brushes are considered as less satisfactory than those shown in the figure at the left. From top to bottom: Tek, Dentabest, and Dobson Deluxe.

Two samples of each brand were tested. The first wear test was run to 188,000 strokes of the machine, the second to 416,000 strokes. The condition of the bristles was checked periodically. The examinations reported in the listings were those made after 416,000 strokes of the wear test.

Brands are listed alphabetically within the 1, 2, and 3 price brackets in the A-, B-, and C-rated groups.

A. Recommended

Shape and size of the following brushes and condition after 416,000 strokes were good, except as noted.

Dr. West's (Weco Products Co., Chicago) 29c. A little narrow. 1

Pepsodent (Pepsodent Div., Lever Brothers Co., N.Y.C.) 69c with 0.3-oz. tube of *Pepsodent* tooth paste. 2

Pyco-pay (Pycop, Inc., Jersey City, N.J.) 69c. Had rubber tooth cleaner on end of handle. A little narrow. Some spreading of bristles. 2

Rexall De Luxe (Distributed by Rexall Drug Co.) 69c. A little long. 2

Tek DeLuxe (Johnson & Johnson; Tek Hughes, Watervliet, N.Y.) 69c. A little long. 2

Pro Double Duty, Style No. 900 (Pro-Phy-Lac-Tic Brush Co., Florence, Mass.) 89c. 3

B. Intermediate

Dobson Deluxe (Distributed by Walgreen Co., Chicago) 59c. Shape, fair; size, too large. Condition, good. 2

Lactona Multi-tufted, No. M-39 (Lactona Inc., St. Paul 1) 69c. Had rubber tooth cleaner on end of handle. Shape and size were good. Condition, good, but some deformation and spreading of bristles. 2

Oral B 40 (Oral B Co., 1539 Terminal Ave., San Jose, Calif.) 75c. Shape and size were good. Condition, good, but some deformation and spreading of bristles. 3

B-

Arlton (Distributed by F. W. Woolworth Co.) 15c. Shape judged unsatisfactory; size, too long. Condition, fair; considerable spreading of bristles and some wear. 1

Dentabest (Distributed by G. C. Murphy Co.) 10c. Shape was fair; size, too long. Condition, fair; spreading of bristles, slight deformation, and some wear. 1

Tek Short Oval (Johnson & Johnson) 29c. Shape was fair; size, good. Condition, fair; considerable spreading and deformation of bristles. 1

Dr. West's (Weco Products Co.) 69c; two brushes, \$1.29 with an 0.85-oz. tube of *Colgate* dental cream. Shape was fair; size, too long. Condition, fair; several bristles spread, considerable wear. 2

C. Not Recommended

Lactona, No. 12 (Lactona, Inc.) 69c. Had rubber tooth cleaner on end of handle. Shape, good; a little narrow. Condition judged relatively poor; many bristles spread and were considerably deformed. 2

Lactona, No. 18 (Lactona, Inc.) 69c. Had rubber tooth cleaner on end of handle. Shape and size, good. Condition judged relatively poor; many bristles spread and considerably deformed. 2

Nylon or rayon tires? Tire experts comment

SINCE the article "The truth about nylon and rayon tires" appeared in the September 1958 BULLETIN, there has been considerable advertising of a new rayon yarn for tires which has been given the name *Tyrex*. Advertising the brand name *Tyrex* disassociates the fiber from rayon, which is not in good standing with many people (because of certain deficiencies in washability of some rayon garments, a matter wholly irrelevant to use of rayon in tires). A considerable boost was given to *Tyrex* when General Motors, after considering equipping the 1959 *Chevrolets* with nylon cord tires, abandoned the idea in favor of *Tyrex*, now being given standing and repute by large-scale advertising. Most of the leading makes of 1959 cars carry as regular equipment tires made with *Tyrex* cord, a grade of rayon cord produced especially for use in tires.

Tires made with *Tyrex* yarn are advertised to "Ride quieter. Roll smoother. Run cooler. Assure greater tire tread life. Give greater fuel economy." To help in arriving at a judgment of the conflicts in claims between the supporters of rayon and nylon tires, inquiries were made of three industry experts on tires, in a position to judge the questions involved, from wide knowledge and experience with tire performance. These men were asked to comment on the relative wear life and safety of nylon and rayon cord tires. One said there was a small difference in favor of rayon, because nylon cord stretches more than rayon when inflated to the same pressure. This stretch makes nylon less resistant to abrasion because the tread is under greater tension. The second said that properly constructed tires of rayon or nylon used under ordinary conditions should give about the same mileage, but he suggested that where there were severe conditions of speed or impact nylon should give superior service. The third expert stated that, when the tread rubber is the same on rayon and nylon tires, the rayon would possibly deliver slightly more mileage. One man frankly admitted that nylon has not been generally

accepted because of the flat spots, with resulting thump, that develop on nylon tires after standing for several hours; this gives rough tire performance for the first half to three quarters of a mile of operation before it disappears.

Now, let us see what experts had to say regarding safety. One said that nylon is a desirable cord where high strength is required, and the lighter gauges of cord fabric that can be used with nylon make a cooler running tire, one that is considered better suited to high-speed operation. The joker is, of course, in the term lighter gauges, for as one of the other experts pointed out, while nylon cord itself is stronger than rayon cord when the size (diameter) is the same, when the cord is built into a tire the strength of the tire depends principally on the size of cords and the number of cords per inch of width. Therefore, the use of nylon does not necessarily mean a stronger tire, or a safer one, for there are many low-cord-count nylon tires on the market, offered for competitive reasons, that do not have the strength of good rayon tires.

One expert stated that both nylon and *Tyrex* tires provide ample protection for normal driving conditions, but thought that nylon tires would be considerably stronger than those made of rayon. Consumers' Research has not yet tested any tires built with the new rayon cord, *Tyrex*, but tests reported in the December 1958 CONSUMER BULLETIN proved that the regular rayon cord tires were equal in strength and impact resistance to the nylon cord tires tested. Consumers' Research is of the opinion that, in view of the fact that the new *Tyrex* rayon cord is said to be stronger than the older rayon cord, subscribers would be well advised to choose either tires with the regular rayon cord or *Tyrex* cord in preference to nylon. (Rayon tires of a given grade or "level" are normally less expensive.) This principle would apply especially when a car is to be used at times in a cold climate where the problem of nylon tire thump can be troublesome.

Important note about Senti-lite night-and-day light switch

Consumers' Research has received several letters from subscribers who have good reason to complain about the business policies of the distributor of the *Senti-lite* automatic light control, reported on in the October 1957 BULLETIN. The company also failed to acknowledge a "certified" letter

from Consumers' Research concerned with these complaints. We believe subscribers would be well advised not to send orders to Senti-lite, Box 166, Jamaica 31, N.Y. We can suggest a satisfactory source for an automatic light switch on request, accompanied by stamped addressed envelope.

Color TV for \$5? Positively no!

"Convert your Television—Living Color in Minutes—True Colors, Blue Skies, Green Grass, Clouds of White, Face Flushed. Brunette and blond hair, etc." Thus is described the truly astonishing "discovery" that was advertised in the New York Daily News and the New York Herald Tribune, and no doubt in other papers around the country. What's more, the "converter" is claimed to fit all sets, and the user can easily install it himself, and it gives "guaranteed color in less than 3 minutes every time set is turned on. . . ." All this for the "low" price of \$4.98, postpaid. We reported on so-called color converters many years ago and showed that they were ineffective, and necessarily so. A month or two ago, one of Consumers' Research shoppers ordered one of the new "converters." When the device arrived, it was, as anyone at all familiar with the principles of color TV might expect from the price of \$4.98, a sheet of tinted flexible plastic. The color was chiefly salmon, and there was a top border of translucent blue (evidently for the "Blue Skies") and a bottom border of green (for "Green Grass"). The center salmon-tinted section would perhaps modify pictures to offer some resemblance to flesh tones, but we are still mystified as to the method of producing the "Clouds of White."

Clothes washer-dryer combinations


(The beginning of this article is on page 6)

tion, designed for outside venting, used no water. To wash and dry a 9-lb. load of clothes will cost about 18c. Excessive leakage current of 3.0 ma. (shock hazard); considered satisfactory for safe operation only if securely and permanently grounded.

Westinghouse Wash 'N Dry Laundromat Deluxe, Model WD-2 (Westinghouse Electric Corp., Mansfield, Ohio) \$530. Effectiveness in washing an 8-lb. load, fair. Machine used relatively large quantities of water. Cost of operation, for electricity, will be about 16c per load. Leakage current was excessive (2.5 ma.); appliance should be securely grounded. The loading door, hinged at the bottom, provided a shelf that facilitated loading and unloading and helped to prevent clothes from dropping to the floor.

TV "COLOR-PIX" SCREEN FILTER

ENJOY
THE COLOR FILTER
NOW!
Easy To Apply
Do It Yourself



TRANSFORMS ALL
BLACK-WHITE
TELEVISION SETS INTO
BEAUTIFUL COLOR TONES
OF BLUE, AMBER & GREEN, ETC.
No Tools Used
Seconds to Attach

* REDUCES GLARE AND SNOW IN PRINCE AREAS *

INSTRUCTIONS:
Simply attach tape to rear surface of film, place outside of screen glass directly at bottom and you receive Color Pix immediately.
(CUT INTO SHAPE DESIRED WITH SCISSORS)

The order coupon stated that "this is not just a filter, or a magnifier, but a real color converter." The installation sheet that accompanied the article (see illustration) was less deceptive, calling it by its real name, a screen filter which will give three tones of color. These colors will always, of course, remain in the same position on the screen. They will in fact produce an interesting if hardly realistic image, depending on what is on the screen at the moment, although one would hardly describe as "Living True Colors" a blue-haired Jack Paar or a green basketball court.

As this article goes to press, the District Attorney in New York City has brought to book the promoter of this device, charging him with untrue and misleading advertising. The "converters" carried a 30-day money-back guarantee, but the city official said he knew of no one who had been able to get a refund.

C. Not Recommended

Color Converter (Continental T.V. Co., P.O. Box 258, New York 10) \$4.98. ¶Also not recommended are all other so-called color television converters selling at low prices, say under \$100 or so.

C. Not Recommended

General Electric, Model 1WD560N1W (General Electric Co., Louisville, Ky.) About \$500, without top. An under-counter combination. Effectiveness in washing an 8-lb. load, fair. Machine designed to be fastened to floor. Poor distribution of clothes caused unbalance switch to be actuated repeatedly during the test, preventing cylinder from revolving at the fastest speed, leaving clothes quite wet. Machine used relatively large quantities of water. Cost to operate, for electricity, about 12c per load. Had excessive leakage current (greater than 5 ma.). Markings on control dials were somewhat ambiguous, and instruction booklet was not clearly written. ¶Model WD660P2, a free-standing (self-contained) unit, gave similar performance.

Springtime rackets to beware of

SPRING comes a little nearer every day—as the poet remarked. Seeds and plants for the coming season have been ordered from gardening catalogs. Early bulbs are poking through the ground in some sections of the country. Inventory is being taken of the garden tools, with a thought to the possible need of getting a new lawn mower. It is a pleasant season of anticipation.

There is, however, a seamy side to these activities. It isn't the "Ides of March" that the consumer must be aware of, but a host of petty racketeers that arrive with the first robin.

The sun and balmy air seem to have a softening effect on consumers; and each year Better Business Bureaus diligently warn people of certain perennial problems, including humus peddlers selling at outrageous prices muck and grime of no fertilizing value, nurserymen promoting trees and shrubs of inferior quality as amazing bargains, mail-order offers of astonishing new varieties of plants and miracle-working plant foods, not to overlook itinerant roof and gutter repairmen, who spray something that looks like aluminum but washes off in the first rain, and painters who do a poor job with low-grade materials and then depart for other areas. This season brings also the slick promoter offering "bargain rates" for some home repair job if the owner will permit it to be exhibited to possible customers. The actual charge is usually excessive, the quality of the work inferior, and no prospects appear.

One of the most prolific advertisers of bargains in the horticultural field is the Michigan Bulb Company, which was ordered last year by the Federal Trade Commission to stop misrepresenting the types and quality of its nursery stock and the guarantee on its merchandise. The Commission's order prohibited such misleading offers as "42 gorgeous rose plants, flowering shrubs and hedge plants. All a \$26.77 catalog value, special \$2.98. . . Sturdy and field grown. . . each plant is at least 1 ft. high." According to the evidence presented, no true rose plants were included in the offer, and not all plants were field grown, one foot high, hardy, or tested for condition by a nursery expert under proper standards. The examiner ruled that the offer was nowhere near \$26.77 in value. The F.T.C. also found the advertised guarantee misleading since the examiner reported that the company sent a "replacement certificate" unless a cash refund was specifically requested and the stock returned.

The Commission noted that the Michigan Bulb

Company, operating also as Dutch Bulb Importers, Rapid Specialties Company, and Flower of the Month, was taking in more than a million dollars a year from its sales.

Another horticultural product that was the object of F.T.C. action was a chemical fertilizer called *Gold Medal Plant Food*. The Commission ordered various companies and individuals involved to discontinue advertising claims that this product was capable of preventing plants from becoming stunted or shriveled under any circumstances, or capable of bringing about an immediate or remarkable increase in the rate of growth of plants dipped into a liquid solution of the so-called "plant food."

Zoysia grass is a current development attracting considerable interest. This type of grass is propagated from plugs or sprigs planted in existing lawns to fill in bare spots or in a well-prepared seedbed. It is a tough, hardy grass, quite heat and drought resistant, that is quite useful for improving lawns in some sections of the country. It has, however, certain disadvantages, chiefly that its growth is slow and it loses its color during the winter. The Federal Trade Commission took action against the Zoysia Farm Nurseries of Baltimore for misrepresenting the rate of growth of its "Amazoy" and "Green Beauty" Zoysia grass. The Commission reported that, contrary to the advertising statements, *Amazoy* had not been approved by the United States Government nor had it been found superior to other grass by impartial public officials and *Green Beauty* had not been proved by the U. S. Dept. of Agriculture to be clean, healthy and uncontaminated.

These are a few of the many commercial gyps, frauds, and overenthusiastically advertised products that are of interest to the amateur gardener and homeowner this time of year.

Just because it's spring, there is no reason for you to be balmy.

Don't ever fall for the apparent convenience of the services of an itinerant salesman or for free "expert" landscaping advisory and guidance service with an order for nursery stock.

Make your horticultural purchases from well-known mail-order houses of good reputation, or your local nursery.

Just remember—what you undoubtedly already know—there is no magical fertilizer, spray, or chemical that can take the hard work and perspiration out of gardening. You wouldn't really want it that way, would you?

Phonograph Records

BY WALTER F. GRUENINGER

Please Note: The first symbol applies to quality of interpretation, the second to fidelity of recording.

Cherubini: *Scenes from Medea*. Eileen Farrell (soprano). Columbia ML 5325. \$3.98. You won't get the flow of the opera from this disk, but you will get a clear idea of Eileen Farrell's artistry, which is considerable by today's standards. Brief assistance from Andre Turp and Ezio Flagello. Arnold Gamson ably conducts the Columbia Symphony. Highly satisfactory recording. AA AA

Chopin: *Polonaises*. Yury Boukoff (piano). Westminster XWN 18779/80. \$4.98. The master of the Polonaise was Chopin. Boukoff of Sofia plays these seven pieces with spirit and taste. He's bettered only a shade by the great Rubinstein performances on Victor, which are almost as well recorded. A AA

Haydn: *Symphonies Nos. 99 and 100*. Philadelphia Orchestra under Ormandy. Columbia ML 5316. \$3.98. Masterpieces. Since Ormandy leads a virtuoso orchestra, the terrific speed at which he takes some of this music poses no problems for the players. But it subtracts from Haydn. Very well recorded. A AA

Kodály: *Hary Janos Suite and Dances of Galantia and Marosszé Dances*. Philharmonic Symphony of London under Rodzinski. Westminster XWN 18775. \$4.98. The suite of the talkative old soldier, Hary Janos, has never been recorded with better style. The other pieces add up to less as music, though they are superbly played, too. The bass drum in "The Battle and Defeat of Napoleon" movement will test any hi-fi set. Other sounds are well recorded, too. AA AA

Lalo: *Symphonie Espagnole & Saint-Saëns: Introduction and Rondo Capriccioso and Havanaise*. Menuhin (violin) with the Philharmonia Orchestra under Goossens. Capitol G 7108. \$4.98. Romantic pieces that appeal on first hearing. The Lalo finds Menuhin working very hard, or so it sounds. Much of what he does, in the way of expression, pleases me. The fifth movement, particularly, yields to no one. In a few spots faulty intonation spoils the effect, but the major criticism is that *romance* comes through laboriously. Well played filler pieces, though with some affectation. Good rapport with the orchestra. Fine reproduction. A AA

Mozart: *Requiem in D Minor*. Stich-Randall, Malanuk, Kmentt, Böhme, Vienna State Opera Choir and Vienna Symphony under Böhm. Epic LC 3507. \$3.98. Stich-Randall's soprano is "white," Böhme's bass wobbles, and there's little cohesion of style on the part of the soloists. The chorus finds it difficult to hit top notes accurately. Otherwise it's all right. Satisfactory recording. First choice of this piece remains the Kempe-conducted Capitol G 7113. B A

Respighi: *Feste Romane & Rachmaninoff: Symphonic Dances*. London Symphony under Goossens. 4 sides, Everest LPBR 6004. \$7.96. Superb performance and magnificent recording under a conductor, who, unfortunately, has not been heard from for a long time. The works utilize the full dynamics of the orchestra. But why are both in one set when they require only two sides each? Some may prefer one or the other. AA AA

Rimsky-Korsakov: *Suite from Le Coq D'Or & Prokofiev: Suite from Love for Three Oranges*. Pittsburgh Symphony under Steinberg. Capitol P-8445. \$4.98. Colorful music from operas heard occasionally in this country. The orchestral score often commands more attention and respect than the vocal line, though neither is a masterpiece. Prokofiev commands more admiration than Rimsky. Scrupulously attentive to the composers' wishes is conductor Steinberg. Fairly well recorded. A A

Tchaikovsky: *Swan Lake Ballet Suite and Waltzes from Onegin, Serenade for Strings, Sleeping Beauty, etc.* Berlin Radio Symphony under Fricay. Decca DL 9990. \$3.98. Characteristic Tchaikovsky melody and harmony played elegantly. The music fairly glows. Rich recording. Altogether a most pleasing disk. AA AA

Vaughn Williams: *Symphony No. 9*. London Philharmonic under Boult. Everest LPBR 6006. \$3.98. First recording of the last symphony of this venerable Britisher who died a few hours before this recording session began. Critics hearing the American premiere in September generally regarded it as a major work—British in feeling, melodic, solid. The performers speak eloquently, the recording is magnificent. A scoop for a new label, which starts off with a very high percentage of first-rate releases. AA AA

The Art of Kirsten Flagstad (soprano). RCA Camden CAL 462. \$1.98. Selections from works seen in the opera house by Wagner, Beethoven, Weber, recorded in 1935 and 1937. Thrilling, eloquent, noble singing. The orchestral background, of course, suffers by comparison with today's stereo disks. But this is a voice and a record to treasure. At this stage of her career one of the current dramatic sopranos—sometimes mentioned in the same breath as Flagstad—Eileen Farrell, appears with the Boston Symphony on the new RCA Victor 2255 which is devoted to pieces from Wagner. She sounds a good deal less exciting than Flagstad. AA B

Encores by Kogan (violin). RCA Victor LM 2250. \$4.98. Eleven pieces ranging from a Nardini Adagio and four Shostakovich Preludes to Sarasate's *Capriccio Basque* and Bloch's *Nigun*. The music suits the silky style of this Russian violinist who is well recorded. AA AA

Famous French Fanfares and Marches. Band of the French Navy under Semler-Colleary. Epic LC 3516. \$4.98. If you like military marches, this is for you! Stirring, expert playing. Very good brass sound. AA AA

Marais and Miranda Revisit the South African Veld (singers). Decca DL 8811. \$3.98. New recordings of old favorites by this pair. There's atmosphere here thanks in part to the unique Bushveld Band which backs up the singers. Marais wrote these "folksongs" based on Afrikaans ditties. His voice sounds rougher than it did years ago but the joyous spirit is ever present. Thoroughly entertaining. Outstanding recording. A AA

Music for Trumpet and Orchestra. Voisin and Ghitalla (trumpet soloists) with the Unicorn Concerto Orchestra under Dickson. Kapp KCL 9017. \$3.98. Included are the Haydn "Concerto for Trumpet," Vivaldi "Concerto for Two Trumpets," and pieces by Purcell. A field day for those who admire the trumpet and works which Kapp states have never been recorded in this country. Voisin is the soloist throughout, and he gives a fairly good account of the music, though there are a few doubtful notes. The duet strikes me as the feature of the disk. Trumpet recording is appropriately bright, yet not edgy. But there's a lack of luster to the orchestra. Since the set is also available in stereo, do you suppose the mike setup for mono was imperfect? A A

Segovia . . . Golden Jubilee (guitar). 6 sides, Decca DXJ 148. \$14.96. Concerti and short classical pieces especially recorded for the 50th anniversary of Segovia's first concert. Nearly every musician acknowledges Segovia as one of the outstanding artists of our time, so a recorded set of his repertoire is treasure. Among the composers are Ponce, Rodrigo, Torroba, Tansman, Sor, Roussel, Roncalli, Segovia. Excellent recording throughout. Segovia acknowledges his gratitude to Decca in the closing grooves of side 6. AA AA

A Maria Stader Recital (soprano). Decca DL 9994. \$4.98. Principally lieder by Schubert, Mendelssohn, Schöck. Miss Stader's voice sounds small, clear as crystal. Her sustained line is exquisite, as in "Du Bist Die Ruh." Elsewhere there's a lack of tonal variety and volume contrast. Acceptably recorded, at low volume level, at some distance. A A

Ratings of Current Motion Pictures

THIS SECTION aims to give critical consumers a digest of opinion from a wide range of motion picture reviews, including the motion picture trade press, leading newspapers and magazines—some 19 different periodicals in all. The motion picture ratings which follow thus do not represent the judgment of a single person, but are based on an analysis of critics' reviews.

The sources of the reviews are:

Boxoffice, Cae, Daily News (N. Y.), The Exhibitor, Films in Review, Harrison's Reports, Joint Estimates of Current Motion Pictures, Motion Picture Herald, National Legion of Decency, Newsweek, New York Herald Tribune, New York Times, The New Yorker, Parents' Magazine, Release of the D. A. R. Review Committee, Reviews and Ratings by the Protestant Motion Picture Council, The Tablet, Time, Variety (weekly).

The figures preceding the title of the picture indicate the number of critics whose judgments of its entertainment values warrant a rating of A (recommended), B (intermediate), or C (not recommended).

Audience suitability is indicated by "A" for adults, "Y" for young people (14-18), and "C" for children, at the end of each line.

Descriptive abbreviations are as follows:

adv—adventure
biog—biography
c—in color (Anso, Eastman, Technicolor, Trucolor, Warner Color, etc.)
car—cartoon
com—comedy
cri—crime and capture of criminals
doc—documentary
dr—drama
fan—fantasy
hist—founded on historical incident
mel—melodrama
mus—musical
mys—mystery
nov—dramatization of a novel
rom—romance
sci—science fiction
soc—social-problem drama
trav—travelogue
war—dealing with the lives of people in wartime
wes—western

| A | B | C | | |
|---|----|----|---|---------------|
| — | 2 | 1 | Accursed, The (British) | mys-mel AY |
| — | 3 | 1 | Affairs of Julie (German) | com-c AY |
| — | 2 | 5 | Age of Infidelity (Spanish) | dr A |
| 1 | 6 | 4 | Andy Hardy Comes Home | com AYC |
| — | 5 | 7 | Anna Lucasta | dr A |
| — | 3 | 1 | Attack of the Puppet People | mel AYC |
| 3 | 10 | 2 | Auntie Mame | com-c A |
| 2 | 6 | 3 | Badlanders, The | wes-mel-c A |
| 3 | 6 | 7 | Barbarian and the Geisha, The | dr-c AYC |
| 1 | 10 | 5 | Bell, Book, and Candle | com-c A |
| 5 | 8 | 3 | Big Country, The | wes-c AY |
| — | 3 | — | Black Orchid, The | dr-c AYC |
| — | 9 | 6 | Blob, The | sci-mel-c AY |
| — | 5 | 5 | Blood of the Vampire (British) | mel-c A |
| 2 | 1 | — | Boot Polish (India) | dr A |
| — | 1 | 5 | Brain Eaters, The | cri-mel AY |
| 2 | 6 | 5 | Buccaneer, The | hist-dr-c AYC |
| — | 7 | 3 | Buchanan Rides Alone | wes-c AYC |
| — | 8 | 3 | Captain from Koepenik, The (German) | com AYC |
| 5 | 9 | 2 | Cat on a Hot Tin Roof | dr-c A |
| — | 6 | 10 | Certain Smile, A (French) | nov-c A |
| — | 7 | 6 | China Doll | war-dr A |
| — | 2 | 2 | Circus of Love (German) | mel-c A |
| — | 5 | 1 | City of Fear | cri-mel A |
| — | 3 | 1 | Cocktails in the Kitchen (British) | com-c AY |
| — | 5 | 7 | Cop Hater | cri-mel A |
| — | — | 3 | Cosmic Monster, The | sci-mel AY |
| — | 3 | 2 | Crawling Eye, The (British) | sci-mel AY |
| 3 | 1 | 4 | Crime and Punishment (French) | dr A |
| — | 3 | 4 | Curse of the Faceless Man | sci AY |
| 2 | 8 | 4 | Damn Yankees | mus-fan-c A |
| — | 8 | 1 | Dangerous Exile (British) | hist-dr-c AY |
| — | — | 3 | Date with Disaster (British) | mys-mel AY |
| — | 5 | — | Davy (British) | com-c AYC |
| — | 7 | 6 | Decks Ran Red, The | cri-mel A |
| 6 | 9 | 4 | Defiant Ones, The | soc-dr A |
| — | 6 | 4 | Doctor's Dilemma, The (British) | dr-c A |
| — | 3 | 3 | Dreaming Lips (German) | dr A |
| 1 | 12 | 6 | Dunkirk (British) | war-dr AYC |
| — | 4 | 5 | Enchanted Island | nov-c AY |
| — | 1 | 3 | Escort West | wes AY |

| A | B | C | | |
|---|----|---|--|--------------|
| — | 5 | 1 | Fearmakers, The | mys-mel A |
| — | 5 | 6 | Fiend Who Walked the West, The | cri-mel A |
| — | 1 | 8 | Flaming Frontier | wes AY |
| — | 1 | 3 | Flesh and Desire (Italian) | dr A |
| — | 2 | 1 | Flesh and the Woman, The (French) | dr-c A |
| — | — | 4 | Forbidden Island | mys-mel-c A |
| — | 8 | — | Foxiest Girl in Paris, The (French) | cri-com A |
| — | 3 | 4 | Frankenstein—1970 | sci-mel A |
| — | — | 6 | Frankenstein's Daughter | mel A |
| 1 | 7 | 7 | From the Earth to the Moon | sci-c AYC |
| — | 4 | 5 | Frontier Gun | wes AY |
| — | 7 | 6 | Geisha Boy, The | com-c AY |
| — | 1 | 5 | Girl in the Bikini, The (French) | dr A |
| — | 1 | 2 | Girl with An Itch | dr A |
| — | 3 | 2 | Good Day for a Hanging | wes-dr-c AYC |
| — | 3 | 1 | Guitars of Love (German) | mus-dr A |
| — | 8 | 2 | Gun Runners, The | mel AY |
| — | 2 | 1 | Guns, Girls and Gangsters | cri-mel A |
| — | 5 | 3 | Gunsmoke in Tucson | wes-c AY |
| — | 3 | 2 | Gypsy and the Gentleman, The (British) | mel-c A |
| 1 | 11 | 3 | Harry Black and the Tiger (British) | mel-c A |
| 1 | 4 | 2 | He Who Must Die (French) | dr A |
| — | 2 | 4 | Hell Squad | war-mel AY |
| — | 3 | 1 | High School Hellcats | dr A |
| 1 | 13 | 5 | Home Before Dark | dr A |
| — | 3 | 4 | Hong Kong Confidential | mys-mel A |
| 6 | 6 | 5 | Horse's Mouth, The (British) | com-c AY |
| — | 3 | 4 | Hot Angel | mel AY |
| — | 3 | 2 | Hot Rod Gang | mel A |
| — | 5 | — | House on Haunted Hill | mys-mel A |
| — | 2 | 1 | House Under the Rocks, The (Hungarian) | war-dr A |
| 1 | 10 | 4 | Houseboat | com-c A |
| — | 5 | — | How to Make a Monster | cri-mel AY |
| — | 12 | 5 | Hunters, The | war-dr-c AY |
| — | 1 | 2 | Hurdy Gurdy, The (Greek) | com AY |
| — | 5 | 4 | I Married a Monster from Outer Space | sci AY |
| — | 2 | 1 | I, Mobster | cri-mel A |
| 1 | 8 | 8 | I Want to Live | cri-dr AY |
| — | 9 | 6 | In Love and War | war-dr-c A |

| A | B | C | | |
|----|----|---|---|---------------|
| — | 1 | 3 | In-Between Age (British)..... | mus-c AYC |
| 3 | 6 | 4 | Inn of the Sixth Happiness, The (British)..... | dr-c AYC |
| — | 9 | 1 | Inspector Maigret (French)..... | mys-mel AY |
| — | 4 | 1 | Intent to Kill..... | cri-mel AY |
| — | 3 | 3 | It! The Terror from Beyond Space..... | sci AY |
| — | 4 | 2 | Johnny Rocco..... | cri-dr AY |
| — | 4 | — | Journey, The..... | dr-c A |
| — | 4 | 4 | Joy Ride..... | mys-mel AY |
| — | 2 | 7 | Kill Her Gently (British)..... | mys-mel AY |
| — | 10 | 6 | La Parisienne (French)..... | com-c A |
| — | 6 | 1 | Last Blitzkreig, The..... | war-dr AY |
| 5 | 10 | 3 | Last Hurrah, The..... | nov AY |
| — | 4 | 2 | Last Mile, The..... | cri-dr A |
| — | 1 | 2 | Last Waltz, The (German)..... | dr AY |
| — | 9 | 1 | Law and Disorder (British)..... | cri-com A |
| — | — | 3 | Legion of the Doomed..... | war-dr AY |
| — | 1 | 3 | Liane, Jungle Goddess (German)..... | adv-c A |
| — | 2 | 1 | Life and Loves of Mozart, The (German)..... | mus-dr-c AY |
| 1 | 3 | 2 | Lonelyhearts..... | dr A |
| — | 2 | 1 | Lower Takes All (British)..... | com-c A |
| — | — | 3 | Lost, Lonely and Vicious..... | dr AY |
| — | 4 | 1 | Lost Missile, The..... | sci AY |
| — | 5 | 1 | Lovers and Thieves (French)..... | cri-dr A |
| — | — | 4 | Machete..... | mel A |
| — | 9 | 2 | Mad Little Island (British)..... | war-com-c AYC |
| — | — | 3 | Man Escaped, A (French)..... | war-dr A |
| — | 8 | — | Man Inside, The (British)..... | mys-mel-c A |
| — | 7 | 5 | Man of the West..... | mel-c A |
| — | 2 | 1 | Man or Gun..... | wes AY |
| — | 2 | 1 | Man Who Died Twice, The..... | cri-mel AY |
| 1 | 11 | 4 | Mardi Gras..... | mus-com-c AY |
| 2 | 11 | 5 | Me and the Colonel..... | war-com A |
| — | 1 | 4 | Menace in the Night (British)..... | mys-mel A |
| — | — | 6 | Missile to the Moon..... | sci A |
| — | 2 | 6 | Money, Women and Guns..... | wes-c AYC |
| — | 6 | 3 | Monster on the Campus..... | sci AY |
| — | 3 | — | Most Beautiful Day of My Life, The (German)..... | dr-c AYC |
| — | 4 | 1 | Mugger, The..... | mys-mel AY |
| — | 5 | 3 | Murder by Contract..... | cri-mel A |
| — | 2 | 3 | Murder Reported (British)..... | cri-mel A |
| 11 | 1 | 1 | My Uncle, Mr. Hulot (French)..... | com-c AY |
| — | — | 3 | My World Dies Screaming..... | cri-mel AY |
| — | 1 | 2 | New Orleans After Dark..... | cri-mel AY |
| — | 3 | 4 | Nice Little Bank that Should Be Robbed, A (British)..... | cri-com AY |
| — | 2 | 9 | Night Heaven Fell, The (French)..... | mys-mel-c A |
| — | 3 | 3 | Night of the Blood Beast..... | sci A |
| 3 | 10 | 2 | Night to Remember, A (British)..... | dr AYC |
| — | 3 | 2 | Nine Lives (Norwegian)..... | war-dr AYC |
| — | 2 | 1 | No Place to Land..... | mel A |
| — | 1 | 2 | Octet (Danish)..... | dr AYC |
| — | 3 | 1 | Of Life and Love (Italian)..... | dr A |
| — | 2 | 6 | Once Upon a Horse..... | war-com AY |
| — | 8 | 9 | Onionhead..... | war-com A |
| 2 | 4 | 4 | Orders to Kill (British)..... | war-dr AY |
| — | 1 | 3 | Pagana, The (Italian)..... | hist-mel A |
| — | 5 | 4 | Party Crashers, The..... | mel AY |
| — | 6 | 7 | Party Girl..... | cri-mel-c A |
| — | — | 3 | Passport to Shame (British)..... | soc-dr A |
| 4 | 7 | 1 | Pather Panchali (India)..... | dr AY |
| — | 5 | 1 | Pepote (Spanish)..... | dr AY |
| 1 | 6 | 4 | Perfect Furlough, The..... | war-com-c A |
| — | 7 | 3 | Pot Bouille (French)..... | com A |
| — | 5 | 1 | Premier May (French)..... | dr AY |

| A | B | C | | |
|---|----|----|---|---------------|
| — | 4 | 2 | Queen of Outer Space..... | sci-c A |
| — | 1 | 2 | Question of Adultery, A (British)..... | soc-dr A |
| 1 | 8 | 4 | Rally Round the Flag, Boys!..... | com-c A |
| — | 4 | 9 | Raw Wind in Eden..... | mel-c A |
| 3 | 13 | 2 | Reluctant Debutante, The..... | com-c AY |
| — | 1 | 2 | Remarkable Mr. Pennypacker, The..... | dr A |
| — | 8 | — | Restless Years, The..... | soc-dr AY |
| — | 3 | 2 | Revolt in the Big House..... | soc-dr A |
| — | 7 | 2 | Ride a Crooked Trail..... | wes-c AY |
| — | 3 | 1 | Rocket from Calabuch, The (Spanish)..... | com AY |
| 3 | 6 | 9 | Roots of Heaven, The..... | nov-c A |
| — | 7 | 2 | Saga of Hemp Brown, The..... | wes-mel-c AYC |
| — | 2 | 3 | Screaming Skull, The..... | cri-mel AY |
| — | 3 | 3 | Secret Place, The (British)..... | cri-mel A |
| — | 4 | 2 | Senechal the Magnificent (French)..... | com A |
| 1 | 6 | 1 | Senior Prom..... | mus-com AY |
| 5 | 10 | 1 | Separate Tables..... | dr A |
| — | — | 3 | Seven Guns to Mesa..... | wes A |
| 1 | 5 | 2 | Seventh Seal, The (Swedish)..... | dr A |
| 3 | 8 | 4 | Seventh Voyage of Sinbad, The..... | fan-c AY |
| — | — | 3 | She Demons..... | sci-mel AY |
| — | 2 | 2 | She Gods of Shark Reef..... | mys-mel-c A |
| — | 6 | — | Sheriff of Fractured Jaw, The (British)..... | wes-com-c AY |
| — | 9 | — | Silent Enemy, The (British)..... | war-dr AYC |
| — | 2 | 2 | Sins of Rose Bernd, The (German)..... | dr-c A |
| 2 | 3 | — | Sleeping Beauty..... | car-c AYC |
| — | 2 | 2 | Snowfire..... | wes-c AYC |
| — | 3 | 1 | Smiley Gets a Gun (British)..... | mel-c AYC |
| 1 | 5 | 2 | Some Came Running..... | dr-c A |
| — | 4 | 4 | Space Master X7..... | sci AY |
| — | 1 | 5 | Spider, The..... | sci-mel AY |
| — | 2 | 5 | Spy in the Sky..... | mys-mel AYC |
| — | 5 | 1 | Step Down to Terror..... | cri-mel AY |
| — | 3 | 3 | Stranger in My Arms, A..... | war-dr AY |
| 2 | 7 | 7 | Tale of Two Cities, A (British)..... | nov AYC |
| — | 1 | 5 | Tank Battalion..... | war-mel A |
| — | 6 | 6 | Tank Force (British)..... | war-mel-c AYC |
| — | 6 | 3 | Tarawa Beachhead..... | war-dr AY |
| — | 2 | 2 | Teenage Caveman..... | fan AY |
| — | 5 | — | Ten Days to Tulara..... | cri-mel AY |
| — | 5 | 4 | Terror from the Year 5,000..... | sci AY |
| — | 3 | 4 | Terror in a Texas Town..... | wes AY |
| 1 | 4 | — | Three Thousand Hills..... | wes-c A |
| — | 1 | 2 | Tokyo After Dark..... | war-dr A |
| 7 | 8 | — | Tom Thumb (British)..... | fan-c AYC |
| — | 4 | 3 | Tonka..... | wes-c AYC |
| 1 | 9 | 2 | Torpedo Run..... | war-dr-c AYC |
| 1 | 2 | 3 | Tosca (Italian)..... | mus-dr-c AY |
| — | 6 | 2 | Truth About Women, The (British)..... | com-c A |
| 1 | 9 | 8 | Tunnel of Love, The..... | com A |
| — | 7 | — | Two-Headed Spy, The (British)..... | war-mel AY |
| — | 2 | 5 | Unwed Mother..... | soc-dr A |
| — | 6 | 2 | Up the Creek (British)..... | war-com A |
| — | 8 | 3 | Villa!..... | biog-c AY |
| — | 3 | 2 | War of the Colossal Beast..... | sci-mel AY |
| — | 6 | 3 | What Price Murder? (French)..... | cri-mel A |
| — | 3 | 4 | When Hell Broke Loose..... | war-mel AY |
| — | 7 | 3 | Whole Truth, The (British)..... | cri-mel AY |
| — | 7 | 10 | Wind Across the Everglades..... | mel-c A |
| — | — | 3 | Wind of Hate (Greek)..... | mel A |
| 1 | 3 | 5 | Windom's Way (British)..... | war-mel-c AY |
| — | 3 | 4 | Witches of Salem (French)..... | dr A |
| — | 2 | 6 | Wolf Larsen..... | mel A |
| — | 3 | — | Woman in the Painting, the (Italian)..... | dr AYC |

The Consumers' Observation Post

(Continued from page 4)

FOOD-FREEZER PLANS are making their appearance again in California. As we pointed out several years ago, there is little, if any, reason for tying up funds in a plan that offers for a specific sum of money paid each month to provide a family with a given amount of frozen foods over a period of months or a year. The quality and selection often leave much to be desired and little or no saving can be made by such a commitment.

* * *

HIGHWAY CONSTRUCTION is expanding; there seems to be no limit to the country's demand for more and better roads. The already overburdened taxpayer is going to be nicked again to provide funds to pay for these improvements. Under several highway construction programs authorized by Congress, the Federal Government pays a certain percentage of the costs and the states supply the balance. Many states, according to The Wall Street Journal, are already having trouble raising enough revenue to provide the matching funds and are expected to increase the state tax on gasoline. The catch is that the Federal Government, too, is looking for revenue for these commitments and is considering a further 1-1/2 cent per gallon boost in federal gasoline taxes. Motorists are somewhat unhappily discovering one of the inescapable realities of political life, namely, that you don't ever get something for nothing, either from the state or federal governments.

* * *

DON'T GIVE THE NAMES OF STORES where you have charge accounts if someone calls you on the telephone to ask a quiz question. According to the Houston Better Business Bureau, one profitable racket is to call a well-to-do person, ask her a question, then tell her she has won a \$5 credit toward a purchase in any store where she has a charge account. Of course the caller needs to have the name of these stores. The trick is then for the swindler to make a purchase, often a sizable one, take the merchandise, signing the victim's name, and disappear. Another aspect of this racket is to ask the store to cash a check for \$50 or \$100 which is signed with the name of the victim, using the charge account as a reference. If somebody tries this trick on you, don't fall for it. If you do, notify the store, the police department, and the local Better Business Bureau at once.

MAKE 1959 A "PIGGY-BANK" YEAR !!!

By subscribing to Consumer Bulletin you can often save enough to fill your Piggy-Bank many times over.

Of course you'll want the big Annual also. It provides a convenient summary of previous product ratings by brand name and contains additional information that has not appeared in the monthly issues.

Please use the order blank on the next page.



DANGER MAY LURK IN THE GOLDFISH BOWL on the kitchen window sill. The Home Safety Review carried a letter from a reader who had placed a goldfish bowl in the picture window in the kitchen. The sunshine coming through the bowl had melted plastic of one of the kitchen chairs and burned a good-sized hole in it. Perhaps it would be wise to avoid other glass or plastic lens-shaped or globe-shaped articles on window sills through which the sun might shine brightly.

* * *

CONSUMERS WHO PURCHASED HOTPOINT WASHERS AND WASHER-DRYERS will be pleased at the company's announcement late last year that it would make replacements on those appliances which had required an abnormal amount of servicing. The chief difficulties apparently occurred with combination washer-dryers, which will be replaced with the 1959 Model LW 950 washer and a 1959 model dryer without charge. Those automatic washers manufactured with centrifugal clutch mechanisms in 1955, 1956, and 1957 will be replaced on a pro-rata basis with a 1959 Model LW 950. On 10-series coaxial transmissions produced in 1957, Hotpoint will replace the transmission with a 1959 transmission at no charge, even for labor. Hotpoint has discontinued production of washer-dryer combinations. The company is continuing to produce separate washers and dryers and is continuing development work on the combination appliances.

* * *

DYED ORANGES should soon disappear from the market, at least for a time. The Supreme Court upheld the Food and Drug Administration in banning the use of Red 32, which is not considered safe as a food dye. It is to be hoped that consumers will learn how to select oranges for quality, which has little, if any, relation to their bright appearance and even yellow color.

* * *

THAT THE 1959 AUTOMOBILES are expensive is obvious to anyone looking into the matter of buying a new car. Furthermore, the new complex designs are going to be hard and expensive to repair, points out Joseph C. Ingraham in The New York Times. Gleaming dual headlamps, bigger wrap-around windshields with the accent on glass throughout the car will make repairs more costly than ever. Mr. Ingraham estimates the charge for replacing a new windshield at \$150 to \$200, a fender panel at \$100, and a damaged bumper at around \$85. It is fairly obvious also that collision and accident insurance will cost the car owner an ever-increasing premium.

Consumer Bulletin

WASHINGTON, NEW JERSEY

Please enter my order as checked. I am enclosing my check (or money order) for \$_____

Begin subscription with _____ issue.

NAME _____

STREET _____

CITY & ZONE _____ STATE _____

3-59-S

Please check your preference:

☐ I enclose \$7 (Canada & foreign, \$7.20) for one year's subscription to Consumer Bulletin monthly (12 issues), AND the big 224-page Annual Bulletin.

☐ New ☐ Renewal

☐ I enclose \$5 (Canada & foreign, \$5.20) for one year's subscription to Consumer Bulletin monthly (12 issues).

☐ New ☐ Renewal

☐ I enclose \$2.50 (Canada & foreign, \$2.75) for a copy of the big Annual Bulletin alone.

Baby bottles—plastic or glass?

A helpful preliminary report on a study now under way. More details to be reported later

ALMOST all babies today are fed, at least in part, by bottle. Even the breast-fed infant will probably be given water and orange juice from a nursing bottle, and it is very common to give such a baby a "supplemental" bottle at least once every 24 hours. Also, in time, he will probably switch to bottle feeding for a period before the great day when he finally learns to drink from a cup.

One of the first choices to be made is between clear glass bottles and those made of translucent plastic. The lighter, unbreakable bottles made of plastic have obvious advantages, but with glass bottles it is easier to see the contents and observe the baby's rate of feeding, and glass bottles are somewhat easier to clean. Considering all factors, Consumers' Research is inclined to favor the use of glass bottles for very young infants, with a probable switch to plastic nursers as the baby gets old enough to drop or throw the bottle on the floor occasionally. At this stage of development, plastic nursing bottles are a great boon.

For the infant, formula is usually prepared daily and stored in the refrigerator until wanted. Bottles for a full day's feedings are needed. When the child is old enough to get whole milk instead of formula and when bottles are no longer sterilized by heat, one or two bottles can be used repeatedly, with careful washing between uses.

Thus, if CR's suggestion of glass bottles for the young infant and plastic for the slightly older baby is followed, a reasonable supply would be six



or eight glass nursers and two or three made of plastic. (Glass bottles should be Pyrex, Dura-glass, or other glass designed not to break under sharp changes of temperature.) For the brands used in CR's trials, nipples, caps, "disks," and other accessories were interchangeable between plastic and glass, and largely among different brands, too.

Most important of the differences among leading brands are the differences among the nipples—in their shapes and in the provisions for admitting air to the bottles to replace milk as it is drawn out. Which nipple to use is largely a matter for determination by trial and error, although the doctor may advise a particular shape in certain cases. Many infants will be just about equally well suited with any good quality nipple.

CR's infant "consultant" in this field seemed to like *Evenflo* nipples best, but the brand of bottle on which the nipple was used was immaterial to this diminutive expert. Other nipples found satisfactory were the *Davol* and *Nursmatic*. These two nipples appeared identical except that the *Nursmatic* was fitted with the "Insta-valve," a metal disk with a valve at its center.

In practice, CR's infant experimenter did not seem to take food any faster or obtain it with any less effort with the "Insta-valve" in place than when the same nipple was used without the valve device.

Experience seems to indicate that gadgets such as the "Insta-valve" are not needed for successful infant feeding. Those who feel tempted to try such special devices should limit purchases to single samples unless and until experience proves them helpful with a particular infant. Limit spending, too, to just the extra *parts* needed; a different nipple may fit quite well on the bottles you already have.



CR'S ANNUAL REPORT ON THE NEW CARS

In Consumer Bulletin for April 1959

Test results and the judgments of experts on 13 of the new 1959 automobiles, along with recommendations of preferred U.S.-built cars in six price classes—together with our second and third choices. The selections have been made with the needs of the typical American family in mind.

ALSO COMING

In Future Bulletins

Small pleasure boats

Review of the 1959 models with ratings of specific outboard hulls and sailing craft

Automatic washers

Anti-slip preparations for rugs

Consumer Bulletin

The pioneer consumer magazine, testing and reporting on products since 1928.

Published by Consumers' Research, Inc., Washington, New Jersey.